TURNING OVER A NEW LEAF

How to make sustainable change in the veterinary profession

FEATURING

Behaviour change for sustainability

Addressing antimicrobial resistance

The value of environmental accreditation

RCVS standards in sustainability

Waste reduction in practice

LINNAEUS

By Margo Mosher, Global Sustainability Director at Mars Veterinary Health



NING OVER A NEW LEAF - HOW TO MAKE SUSTAINABLE CHANGE IN THE V

Embracing the change required to make a veterinary practice more sustainable takes time and effort but the benefits are huge. Not only are you making the world a better place for people, pets and the planet. A focus on sustainability can improve the quality of patient care, support business performance and inspire your team by enabling them to make a difference.

This new report, *Turning Over a New Leaf – How to Make Sustainable Change in the Veterinary Profession*, explores the steps that veterinary practices can take to manage their impact on the environment and the effect this can have on social behaviour and wellbeing. It presents a range of perspectives, demonstrating the value of industry-wide collaboration.

Working within considered and established frameworks helps to guide our busy teams. Sue Paterson from the RCVS considers changes to the Practice Standards Scheme that will support sustainability, while April Sotomayor from Investors in the Environment explains how external accreditation can support your goals and showcase the action you've taken.

The veterinary profession faces unique challenges and opportunities in how to tackle environmental issues. Fergus Allerton and Zoë Halfacree discuss the steps that can be made in clinical practice to combat antimicrobial resistance and surgical waste. Ellie West provides a working perspective on integrating sustainability within a large veterinary organisation.

To implement change, you need to bring your teams on the journey. Libby Kemkaran explores how to approach behaviour change for sustainability, while Ben Baker, Diane Royle and Elisa Robinson discuss their personal experiences of working with others to make their primary care and referral sites more environmentally-friendly.

Thank you to all our contributors, who have shared their experiences and guidance for the benefit of the profession and the planet. I hope it will help to inspire our readers because every change, large or small, truly makes a difference.

ARY PROFESSION



Embedding sustainability in standards

Sue Paterson, RCVS Junior Vice-President and RCVS Council Lead for Environment & Sustainability

PAGE 4

Addressing antimicrobial resistance through evidence and awareness

Fergus Allerton, RCVS & EBVS® European Specialist in Small Animal Internal Medicine at Willows Veterinary Centre & Referral Service



Putting waste reduction into practice

Zoë Halfacree, RCVS & EBVS® European Specialist in Small Animal Surgery at Davies Veterinary Specialists and a Director of Vet Sustain



The value of environmental accreditation

April Sotomayor, Principal Consultant for Investors in the Environment (iiE)

Behaviour change for sustainability

Libby Kemkaran, Neurocoach and Director of Kemkaran Consulting Limited and Vet Sustain





Starting the journey: integrating sustainability into your organisation

Ellie West, RCVS and EBVS® European Specialist in Veterinary Anaesthesia and Analgesia at Davies Veterinary Specialists



Sustainability highlights at Linnaeus in 2022



PAGE 13

Leading sustainability in primary care Ben Baker, Facilities and Client Care Co-ordinator at Blacks Vets and Diane Royle, Registered Veterinary Nurse (RVN) at D&T Veterinary Centre

PAGE 15

References

PAGE 27



TURNING OVER A NEW LEAF - HOW TO MAKE SUSTAINABLE CHANGE IN THE VETERINARY PROFESSION

Embedding sustainability in standards



By Sue Paterson, Royal College of Veterinary Surgeons (RCVS) Junior Vice-President and RCVS Council Lead for Environment & Sustainability

With the impacts of the climate crisis becoming clearer – and the UK committing to net zero carbon emissions by 2050 – the RCVS set up an Environment and Sustainability Working Party to explore how we could support the profession to be more sustainable.



As a keen sustainability advocate, I had the pleasure of chairing the working party. Sustainability within the veterinary profession is hugely important to me and I am equally passionate about making my own discipline more sustainable. In spring 2022, I spent three days in Scandinavia lecturing on sustainable dermatology practice, including responsible use of antimicrobials. Additionally, I have recently launched a range of sustainable dermatology products for the UK and European pet care markets.

One of the working party's key roles was to consider what the best regulatory mechanism would be for the RCVS to help encourage veterinary practices to embed sustainability in their everyday considerations and improve how they do things accordingly.

As well as looking at how we could help the profession with its sustainability agenda, the RCVS also began to look at its own sustainability policies to lead by example. In 2021 we signed up to the Investors in the Environment (iiE) scheme, achieving Bronze accreditation in early 2022.

In many respects, we have been pushing at an open door as many individual practices and practice groups are well ahead, and there are many vocal advocates for greater sustainability in the veterinary sector at organisations such as Vet Sustain.

⁶⁶There are many vocal advocates for greater sustainability in the veterinary sector.⁹⁹

Overall, it was decided that the best way to introduce new environmental sustainability requirements was through the Practice Standards Scheme (PSS), with new standards that all practices would have to adhere to. We also decided to develop a new Environmental Sustainability Award that would recognise those practices leading the way in addressing the climate crisis.

RCVS Council approved the new standards and the award in 2022, and we are introducing the changes on a phased basis.

Practices can now apply for the Environmental Sustainability Award, with assessments having started from January 2023. The award allows practices to demonstrate they have embedded environmentally sustainable behaviours and are excelling with their sustainability goals. The award includes points for reducing waste, consolidating orders of medicines and minimising drug wastage, along with calculating the practice's carbon footprint and setting reduction targets.

⁶⁶ Practices can now apply for the Environmental Sustainability Award.

Changes to the standards are effective from summer 2023, with major changes having been made to both the Core Standards and General Practice requirements. These new standards were developed by the Practice Standards Group, in collaboration with the Centre for Sustainable Healthcare (CSH), a charitable organisation with extensive experience of supporting human healthcare services to implement sustainable practices.

The changes cover sustainability over a wide range of practice areas. This includes having a practice sustainability policy; communicating sustainability achievements to staff and clients; minimising anaesthetic gas usage; and increasing guidance around the responsible use of antimicrobials, anthelmintics and ectoparasiticides. In addition to improving environmental sustainability, the new and amended standards also include requirements to help make practices more socially sustainable through measures such as increasing diversity and inclusion.

We will be signposting the profession to a wide range of resources to help them better understand and meet the new requirements. In the meantime, if you have any questions, please contact the Practice Standards Team on pss@rcvs.org.uk



ABOUT THE AUTHOR

Sue Paterson qualified from Cambridge and started her career in mixed practice in Devon before becoming a veterinary dermatologist. She has been an RCVS and EVBS[®] European Specialist in Veterinary Dermatology for more than 20 years. Sue was elected as a Fellow of the RCVS for meritorious contributions to clinical practice. She is a past President of the British Small Animal Veterinary Association and the European Society of Veterinary Dermatology.

She is the current President of the World Association of Veterinary Dermatology.

Sue has published seven textbooks, written numerous peer-reviewed articles and contributed chapters to small animal and equine publications. She lectures extensively in Europe and America.

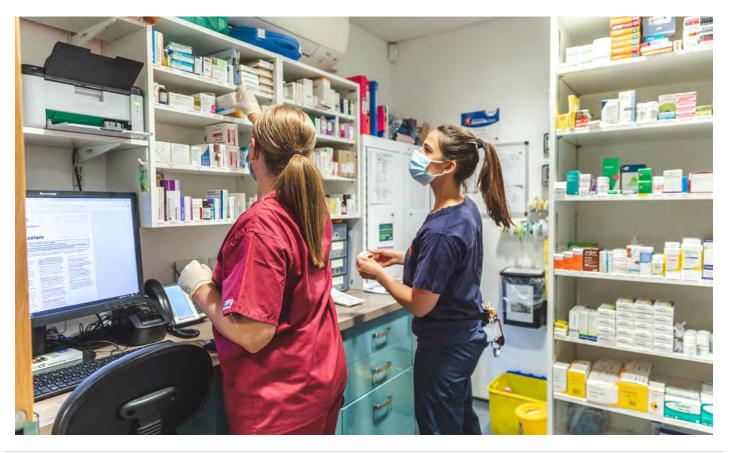
Sue is now the Veterinary Director of Veterinary Dermatological Ltd and veterinary telemedicine company Virtual Vet Derms. She is a passionate environmentalist and a keen long-distance walker, runner and cyclist.

Addressing antimicrobial resistance through evidence and awareness



By Fergus Allerton, RCVS & EBVS® European Specialist in Small Animal Internal Medicine at Willows Veterinary Centre & Referral Service in the West Midlands

The significant impact on human health from antimicrobial resistance (AMR) is widely documented,^{1,2} with global mortality caused by multi-drug-resistant infections anticipated to continue growing.³



7 | TURNING OVER A NEW LEAF - HOW TO MAKE SUSTAINABLE CHANGE IN THE VETERINARY PROFESSION

Veterinary professionals are critical stakeholders in taking a One Health approach to AMR, which highlights the links between animal, human and environmental health.⁴ Given the overlap of antimicrobial classes between human and veterinary medicine, their use in animals could amplify levels of AMR among pathogens of public health concern.^{5,6} Indeed, multi-drug resistant bacteria have been isolated from farm⁷ and companion⁸ animals.

There are also negative impacts of antibiotic residues and AMR on the health of aquatic and land ecosystems.⁹ The negative implications of AMR on animal health are also well recognised,¹⁰⁻¹³ with the inability to treat simple infections leading to poor animal welfare and limiting the care we can offer. Finally, medicines generate a carbon footprint, especially in the supply chain, and are a large part of the procurement footprint, so antibiotic stewardship can save carbon emissions too.

We are at the frontline of the fight against AMR and also leaders in animal welfare. This requires a vital balancing act in how our profession protects the treatment and best interests of our patients, whilst also safeguarding human and environmental health. To maintain our access to antimicrobials, we must continually demonstrate our ability to reduce, refine and rationalise our prescribing habits.

Evidence-based education

Addressing the threat of AMR relies on increased awareness amongst our profession and with pet owners. Yet knowledge of AMR and rational antimicrobial use guidance is poor among surveyed final-year veterinary students,¹⁴ highlighting a need for further training in this area.

We must fully utilise education resources that provide up-to-date, evidence-based information succinctly to our time-poor community. The 2018 PROTECT ME poster¹⁵ offers recommendations for antibiotic use and appropriate avoidance for common conditions. This includes advice to prescribe only when necessary, reduce prophylaxis, seek non-antibiotic treatment options and culture appropriately.

⁶⁶We are at the frontline of the fight against AMR and also leaders in animal welfare.⁹⁹

Microbiology laboratories can also encourage appropriate antibiotic use by guiding clinicians in selecting antibiotics, reporting options based on susceptibility testing reports, and recognising contaminants or resident bacteria flora as opposed to true infection-causing bacteria.

Our profession should feel reassured that they can follow evidence-based guidelines detailing presentations where antibiotics are deemed unnecessary. Gastrointestinal disease, for example, offers few indications for justified antibiotic use.¹⁶⁻¹⁹ Where this information is not always available, recommendations can be based on expert opinion, extrapolation from other species and anecdotal experience, which support clinicians in reaching a decision that optimises the outcome for their patient while minimising the risk of AMR.

As antibiotic use is the main driver of AMR, veterinary prescribers have an important role to play. But prevention of use will have the biggest impact, supported through robust infection control. In many practices, veterinary nurses and patient care assistants lead on hand hygiene, surgical, wound and catheter hygiene, along with infection control protocols. Operational teams can support with stringent cleaning and hygiene, particularly in the face of infectious and zoonotic diseases.



The vital role of pet owners

Educating pet owners on AMR is critical if we are to engage this key stakeholder. This is particularly important since conversations with clients can lead to clinicians feeling pressurised to provide antibiotics.²⁰

While remaining entirely sympathetic to our patients and clients, recovery is not always dependent on antibiotic therapy. A non-prescription form²¹ has been produced by the British Small Animal Veterinary Association (BSAVA) and Small Animal Medicine Society (SAMSoc) to support vets to share a message of rational antibiotic use with pet owners. The form highlights that a clinical decision in the best interests of their pet has been made that does not involve antibiotics, while offering alternative options for case management.

Addressing underlying conditions for patients on long-term courses of treatment could have a particularly significant impact on tackling AMR. We still face a dilemma, nonetheless. Prescribing antibiotics can be beneficial if there is an underlying infectious aetiology or should sepsis develop, and may reduce the environmental and welfare costs of treating more serious disease.

Discussions with pet owners about AMR can be led by all areas of the veterinary practice including client care, reception and clinical teams. An antibiotic amnesty pilot launched in November 2022 by the veterinary profession and NHS Midlands, for example, aimed to encourage the public to return unused or unwanted antibiotics to appropriate sites for safe disposal. Promotion of the campaign included reception posters and an animated film, reminders by client care teams, updates on social media and website resources.²² It has been shown that when provided with the correct information, more that 75% of the public disposed of their antibiotics appropriately.²³

Greater awareness across our profession and the public, supported by a One Health approach, will hopefully translate into less reliance on prescriptions, safer disposal practices and a reduced threat from AMR.

ABOUT THE AUTHOR

Fergus Allerton qualified from the University of Bristol in 2004 and spent six years in mixed animal practice in Worcestershire before completing a residency in small animal medicine at the University of Liege, Belgium. He joined Willows Veterinary Centre and Referral Service in Solihull in 2013 and became an RCVS & EBVS® European Specialist in Small Animal Internal Medicine in 2016.

He is Chairman of the Small Animal Medicine Society and helped with the relaunch of the PROTECT ME antibiotic guidelines. He is the current Editor of the BSAVA Formulary and Companion and an Associate Editor for JAC-AMR. His primary research interest centres on optimising antimicrobial stewardship via guideline development and review (ENOVAT) and the creation of tools to educate pet owners about AMR.

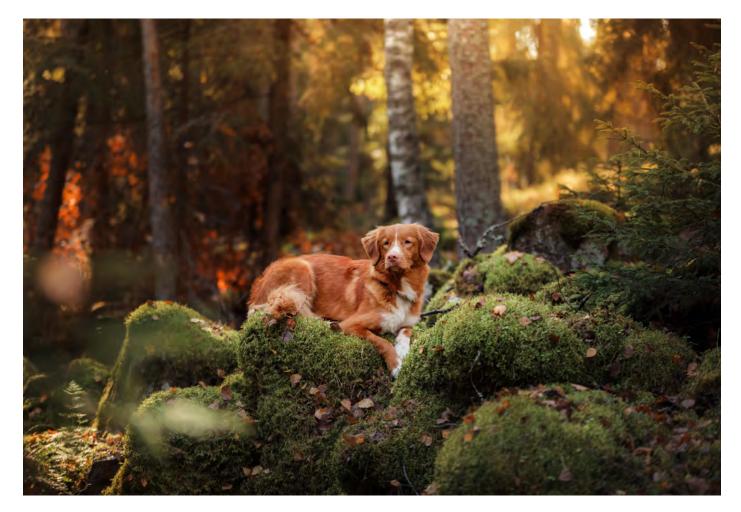


Putting waste reduction into practice



By Zoë Halfacree, RCVS & EBVS® European Specialist in Small Animal Surgery at Davies Veterinary Specialists in Hertfordshire and a Director of Vet Sustain

Healthcare can have an environmental impact from energy usage and waste produced by delivering care.²⁴ A few key areas contributing to the carbon footprint of healthcare are the procurement of pharmaceuticals, equipment and consumables.²⁵



We heavily rely on single use items in veterinary practice, which have revolutionised healthcare through infection control.²⁶ However this has turned into an over-dependency on disposable items.²⁷ Rationalising the use of consumables, and reducing the resulting volume of waste, is vital if we are to become more sustainable.

We all strive to provide the best clinical care, so how do we balance this with reducing our consumable use? It is an interesting question when you begin to look at the evidence.



Sustainability swaps

An easy switch to make in clinical practice is surgical scrub hats. A hair covering has a strong evidence base for preventing the shedding of hair or dander into the environment. Reusable fabric theatre hats are superior to single-use disposables when comparing environmental contamination with particles and bacteria with a hat laundered daily.²⁸

The operating theatre produces waste and can also contribute to carbon emissions.²⁹ A detailed life-cycle analysis comparing all aspects of the environmental impact of reusable versus single-use disposable gowns³⁰ highlights how reusable textiles have a significantly lower impact despite their laundering, repackaging and resterilisation.

⁶ Rationalising the use of consumables, and reducing the resulting volume of waste, is vital if we are to become more sustainable.⁹⁹ Further studies tell the same story, reporting that reusable gowns reduce energy consumption by 64%, greenhouse gas emissions by 66%, blue water consumption by 83% and solid waste generation by 84% compared with single-use alternatives.³¹

We must maintain standards for infection control when using reusable products. Responsibility for harm when reusables are used outside the manufacturer's instructions lie with the user.

Reusable surgical textiles should be monitored for number of uses and for signs of wear as the barrier function reduces after a certain number of washes without appropriate maintenance. Modern reusable surgical textiles can have superior barrier properties to the single-use materials; making the right switch could improve gown performance and reduce environmental impact.

Non-sterile examination gloves are also worth consideration. A campaign at Great Ormond Street Hospital (GOSH) helped staff risk assess the use of non-sterile examination gloves (NSEG) and improve adherence to hand hygiene protocols.³² Audits showed that NSEG overuse meant opportunities for hand decontamination were missed. The campaign was motivated by concerns regarding infection control³³ but brought additional financial and environmental benefits.

The campaign generated positive results. In the following 12 months GOSH ordered 3.7 million fewer NSEG compared with the year before, saving more than £90,000 and avoiding 18 tonnes of plastic. Plus, staff reported hand dermatitis less frequently.³⁴

Access to reusable surgical textiles can also bring greater business resilience due to a lower risk in operational disruption caused by supply chain issues. This was experienced during the COVID pandemic when single-use personal protective equipment was diverted to the NHS.

⁶⁶Access to reusable surgical textiles can also bring greater business resilience.⁹⁹

A balancing act

Whilst we must demonstrate responsible stewardship of our resources, maintaining outstanding quality of patient care is our priority. Ongoing auditing for quality assurance and infection control is essential when any changes are being made. Implementing decision-making processes in clinical practice, backed by the evidence available and supported by the practice leadership team, will help to establish the best way to care for our patients as well as the environment.

ABOUT THE AUTHOR

Zoë Halfacree is an RCVS & EBVS® European Specialist in Small Animal Surgery at Davies Veterinary Specialists in Hertfordshire. She is also a subject matter expert in sustainability, contributing to the work of the Linnaeus clinical board. Zoë works with colleagues and stakeholders across Linnaeus and Mars Veterinary Health to promote the benefits of environmental sustainability.

Zoë volunteers as a Director at Vet Sustain, which aims to inspire, enable and empower veterinary professionals to make changes for sustainability. She chaired its greener veterinary practice working group between 2020 and 2022 and is a member of its veterinary curriculum working group.

With Zoë's drive and support, Vet Sustain published a greener veterinary practice checklist to help these workplaces operate in a more environmentally-friendly way. The checklist was developed with the British Veterinary Association (BVA), the British Veterinary Nursing Association (BVNA) and the Society of Practising Veterinary Surgeons (SPVS).

Zoë has completed the Cambridge Institute of Sustainable Leadership course in business sustainability and is currently undertaking a Masters in sustainability and behaviour change. She recently won Green Veterinary Individual of the Year at the Veterinary Green Awards 2023.

The value of environmental accreditation



By April Sotomayor, Principal Consultant for Investors in the Environment (iiE)

Rapidly rising environmental awareness across the veterinary sector has many people wondering how they can improve their environmental footprint and where to begin. Unlike the NHS, which has been working towards sustainable development performance indicators for years, the veterinary sector is yet to fully grasp its cumulative environmental impact but is beginning to understand its power and influence on making impactful change.



However, with little data on the environmental impact of the sector, it is difficult for the average practice to understand how well they are doing compared with others like them. With the UK Government targeting net-zero emissions by 2050, however, it makes sense for practices to begin to benchmark their own progress against baseline performance. Implementing activities to improve these results can bring a whole range of co-benefits for staff wellbeing and sense of purpose, the natural environment and even the financial good of the practice itself.

Benchmarking progress can help you move beyond the satisfaction of the quick win and develop your practice management such that sustainable development is central to your work, enabling you to achieve those slower, bigger wins and ensure you remain active in all key areas of impact. Working through a structured scheme like iiE accreditation can help to make this easier and more rewarding.

BENEFITS OF EXTERNAL ACCREDITATION

- Clear and tangible milestones help you get started, set achievable targets, and keep going
- Support and guidance from experts
- Joining a wider community, sharing experiences and resources
- External endorsement from an organisation that has no vested interest but prioritises improvements in sustainability
- Levels and rankings so you know how you perform compared with others

This may all feel overwhelming in the context of a busy practice – but you need not go it alone. Using the iiE framework and joining other members working towards the goal of sustainability encourages people to get started and, more importantly, keep going. Independent environmental advisers at iiE give the practice an impartial assessment of performance to build trust and credibility into your journey – but then propel you forward, often moving up the levels from Bronze to Silver and Green annually.

The iiE framework and audit helps practices go beyond compliance and make more of other benefits that lead to improving practice culture and connecting people to the shared purpose of improving the environment. Sustainability isn't a final destination – it's a process and there will always be people to engage and new things to improve.

•• Sustainability isn't a final destination – it's a process.**



According to a recent green skills analysis³⁵ there is great value in upskilling existing job roles in sustainability – not everyone needs to be a sustainability expert, but all roles should access the appropriate knowledge and advice to help them do their bit. Bringing together a green team or group of people with adequate time, capability and passion to lead the way at practice level is key, but this doesn't mean radically changing their day job. This green team could include a core of individuals responsible for implementing actions as part of their day job, with a wider participation of other staff to bring in their insights and ideas.

The green team also performs the role of championing your environmental goals to other colleagues. A strong team will also be vital to outreach across the practice, making sure everyone knows what the business is working towards (low carbon, low waste, boosting nature) and understand they will be an important part of this evolving culture.

Working through an environmental accreditation like iiE – which offers a framework, individual and team learning support, and tools – helps practices make the sustainability transition at speed.

ABOUT THE AUTHOR

April is a member of the Climate Reality Leadership Corps and Sustainability Consultant at the environmental charity PECT, where she manages the national accreditation scheme Investors in the Environment (iiE). April has over 14 years' experience working on a range of sustainability issues within organisations, including using environmental management as a framework to drive positive change and improve environmental impact.

She currently supports veterinary practices to embed a system that engages staff with activities to understand where they can make improvements as part of their everyday roles, including enabling efficiency actions to tackle climate change and reduce waste. April is also a member of the Vet Sustain Greener Veterinary Practice Working Group.

Leading sustainability in primary care

Ben Baker, Facilities and Client Care Co-ordinator at Blacks Vets in the Black Country, and Diane Royle, Registered Veterinary Nurse (RVN) at D&T Veterinary Centre in Staffordshire, are green group leads at their practices. Their focus on sustainability has helped their practices earn Investors in the Environment (iiE) accreditation. We joined their conversation about how they achieved this – and what it means for them.



Being a green lead

Ben: My role ranges from facilities management to complaints, health and safety, marketing and IT. I became a green lead due to my background in project management and I work across our five branches, which employ about 100 people. Having an existing knowledge of areas we could improve, such as insulation and energy efficiency, was very helpful. I focus on iiE accreditation, promoting sustainability and developing an engaged green team.

Diane: I work as an RVN across our two branches. In 2020, our clinical director Sarah Sheppard wanted to set up a green group to focus on sustainability. It looked like a big project, but I put up my hand and said I recycle, with little idea of what else would be involved! I fell into the role but I'm glad I did.

Having a smaller team of about 20 makes it easier to communicate, so we gathered ideas from everyone on becoming more sustainable. I share the green lead role with Sarah because we have different but complementary skills.

Ben: I also share the green lead role with our operations manager Sarah Lewis; it's a real team effort. When we fill in data, we sit down together and make sure we ringfence that time and space to ensure it's done correctly.

Diane: That sounds ideal. I also work with our clinical director Sarah on data to ensure it's been checked again for accuracy.

Ben: It's good to bounce ideas off people; you can end up going down paths you don't need to, so it's helpful to get others' perspectives.

Diane: We did that with the way data was being collected and shared. You can risk spending too much time on the detail behind the data, when actually it's worth taking a step back to look at the overall trends instead.

Ben: That is similar to us. You can assume the data needs to be more thorough than required. We found collecting historical data difficult and spent lots of time contacting old suppliers. After speaking with iiE, we were told to do what's reasonable. Rather than going back three years, focus on two years but do it well. Don't let great get in the way of good.





Working with others

Diane: Because we are a small team, everybody has responsibility for something. This could be recycling, turning lights off or CPD on lower flow anaesthesia. Everyone is part of the green team, no matter how involved they are.

In time, people have shown their own interests in sustainability and I ask them to focus on that. My colleague Jo Waldron is brilliant at community projects so she leads that and I focus on writing it up for the audit.

Everyone is part of the green team, no matter how involved they are.

Ben: We promoted the green group in our weekly communications. Like Diane, we targeted individuals with an interest in sustainability – people who were taking foil home to recycle or collecting food leftovers to compost.

Our green group comprises vets, nurses and a maintenance manager, all with different expertise. We asked everybody to take on an achievable project each. One of our vets was studying for her certificate and didn't have much time but wanted to come along. We encouraged her to offer ideas and encouragement to others, which worked well.

Highlights and hurdles

Ben: People who wouldn't usually work together are now engaging in new ways. We've always been close-knit but the green team has strengthened those bonds.

Diane: We've experienced real changes in mindset. Patient care is our priority but the environment is now in people's mindset too. From switching off lights to recycling – colleagues are proud of their actions, which have become natural behaviour.

Ben: Finding time can be difficult. It's important to break tasks into manageable pieces, so you can see what's been accomplished. Dealing with waste suppliers was challenging but after speaking to colleagues in Linnaeus, we are switching providers.

Diane: I agree. No matter how prepared you are, completing your iiE audit is a big job. Five minutes here and there isn't enough, but the more people are on board, the more you can spread your workload.

Top tips

Diane: Definitely become a green lead. It's rewarding because you know you're doing something good and improving attitudes to the environment. I'd recommend sharing the role with someone with a different skillset, and getting lots of people involved.

66

It's important to break tasks into manageable pieces, so you can see what's been accomplished.

Ben: Completely agree. Be realistic and kind to yourself because a lot of the work isn't that onerous. It should be happening anyway; it's good business sense to monitor your resources and waste financially as well as environmentally.

Also, seek advice. We struggled to work out what to prioritise, so we spoke to iiE and they recommended which actions to take.



Ben Baker with Sarah Lewis at Blacks Vets

Looking back

Diane: Earning Silver accreditation was amazing. It's also the little wins that make my day. One colleague came into work with a pre-packaged apple and told me he was putting his plastic in the recycling bin. I asked why he had a plasticwrapped apple in the first place and he's only had loose apples since – unless he brings them in on my days off!

Ben: Quickly gaining Bronze accreditation was a huge personal achievement. By bringing people together through the green group, communication within Blacks is much easier, and to me that's a real benefit.



ABOUT THE CONTRIBUTORS





Ben Baker joined Blacks Vets nearly two years ago. His principal role is to look after facilities, client care, and assist in the general running of the practice. He is a qualified internal auditor and previously worked in project management and account management roles.

Diane Royle qualified in 1995 but took a 20-year break from veterinary practice to raise her family and explore other career opportunities. Diane returned to D&T three years ago and enjoys being a part of its team again. She took on the role of sustainability lead in 2020 as D&T's iiE journey began.

Behaviour change for sustainability



By Libby Kemkaran, Neurocoach and Director of Kemkaran Consulting Ltd and Vet Sustain

Our need for swift, effective behaviour change is key to addressing our environmental challenges, yet resistance to change is still a barrier in some veterinary practices.



Changing to sustainable practices can be hard. Good change management should successfully implement the processes, business strategies and behaviours that we need for our planet, while minimising potentially negative outcomes resulting from change itself. We must recognise the barriers to behavioural change and focus on the strategies and techniques that avoid disruption, disharmony or increasing attrition within a veterinary team.

Leadership through change

Evidence of climate change has been exponentially growing³⁶ but you may have team members who struggle to accept this reality.³⁷ Recognising climate change can create the need to immediately change existing – and conflicting – behaviours that were previously seen as normal, which can be uncomfortable and hard work. It is simpler, easier and safer neurologically to resist change. This creates a challenge as well as an opportunity to motivate and inspire individuals to change, because it could lead to discomfort and stress.

Failure to adequately manage individuals through change is costly. We are in a 'code red for humanity' due to global heating³⁸ and most people understand there are substantial hazards resulting from inaction. However, there are also implications for organisations trying to implement any kind of change, whether it relates to sustainability or other operational areas. Employees disturbed by this can become unproductive, leading to presenteeism and 'quiet quitting' if change is not managed well.³⁹⁻⁴²

Our beliefs drive our behaviours, which drive all our communications. It is essential we understand these different belief systems and manage expectations for different thinking styles to effect sustainable behaviours within a team. Old-fashioned motivation by carrot and stick from a 'command and control' model should instead become 'trust and inspire'.

When we propose more environmentally-friendly changes in a way that allows veterinary professionals to feel safe, and feels compatible with providing excellent quality of care, it is more likely that change will be comfortable and therefore sustained.

⁶⁶Our beliefs drive our behaviours, which drive all our communications.⁹⁹

Cognitive diversity

There is an irrational perception that everyone in the world thinks like us but they don't. We also think everyone communicates and processes like us, and they don't. Diversity of thought, and the inclusion of others, is incredible important. There are a huge range of personality types working in the veterinary sector, which adds to its creativity and adaptability.

If we can understand our staff, and sustainability leaders can understand the blind spots in their own belief systems, we can implement a smooth transition to environmentallyfriendly veterinary healthcare. Studies show a four-way split of different thinking styles⁴³ that can be personified in The Big Cat Vet Brain⁴⁴ types I have identified below.

Cheetah

The explorer and creative of the group. This is a fast-talking and agile mind, able to see the big picture, strategise and create effortlessly. They therefore adopt new ideas easily when presented with enough reason to get onboard and embrace change; such as reusable surgical textiles and alterations to waste management systems. They can be involved in change by calling to their helicopter view of what sustainable healthcare could look like, rather than where we are now, as they are highly visual processors.

Lion

Lions are all about the pride. They get onboard with change so long as they understand how it will help everyone in the practice team; this could include the direct benefits of antibiotic stewardship to patient care and reducing resistance, or the indirect benefits of greening outside areas to staff wellbeing and retention. As an auditory processor they need to hear the story, then they will be cheerleaders who will bring others along with them. As natural speakers, they find ways to communicate effortlessly through newsletters, notice boards, webinars and social media.

Leopard

The leopard is resistant to change and doesn't like to do things differently to how they've always done them. Change for a leopard is difficult and feels unsafe. This is a challenge when sustainable practices are relatively new in veterinary practice. Leopards need to know the context for everything and take pride in consistency, so robust flows of information are vital. To get them on board with change requires step-bystep hand holding and a kinesthetic approach as it needs to feel safe. Moving to lower flow anaesthesia, for example, may require a delicate balance of education, equipment and expert support to avoid discomfort.

Tiger

Owners of data, detail and precision in the group. As auditory digital processors, they like to communicate in data and believe process is more important than people. Risk averse, they hate to waste time or money; they like a warranty and to know everything will work before they start. They may therefore be later adopters of sustainable changes like onsite renewable energy technologies unless there is a robust business case and contract in place, or they have great trust in the change-makers.

However, we still lack a lot of knowledge about how best to be sustainable in veterinary practice, and the trade-offs between different environmental harms, so tigers will be pessimistic about such changes due to the lack of proof. Breaking down change into steps and processes will make tigers feel safe enough to get on board; external accreditation provides a recognised framework that will also help.

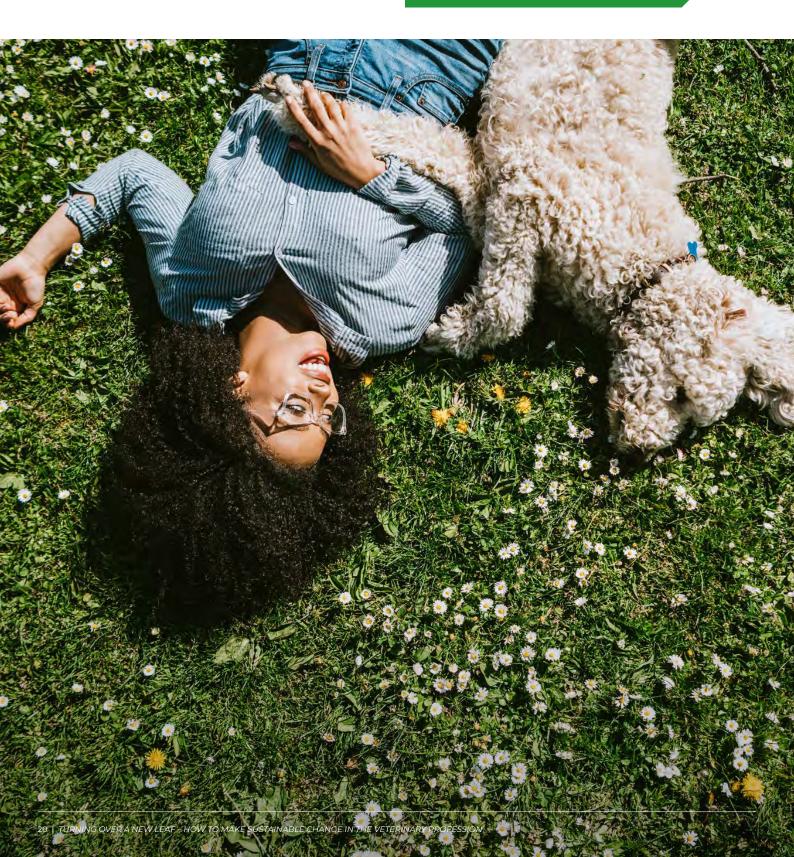
Everyone is different

There is no 'one size fits all' for behaviour change. Everyone needs a sense of autonomy, mastery and purpose to deliver peak performance, which will be needed to drive improved environmental sustainability in veterinary practices.⁴⁵ Recognising the personality types in your team can radically improve the ability of a leader to deliver sustainable changes⁴⁶ and increase team harmony during the transformation.

ABOUT THE AUTHOR

Libby Kemkaran is a Neurocoach specialising in behavioural change and leadership. Creator of Tame Your Brain, TAME change management system and the Big Cat Vet Brain profiling tool, she delivers consultancy to practices and organisations worldwide, and coaches leadership teams and entrepreneurs to peak performance.

Qualified as a vet and Accredited Performance Consultant and one of the founding Directors of Vet Sustain, her interests have also led her to train with the Climate Reality Project with Al Gore, and she is now a Climate Reality Leader.



Taking the leap: how we achieved top accreditation



By Elisa Robinson, Head of Nursing Services and green lead at Wear Referrals in County Durham

In the summer of 2020, the team at Wear Referrals decided to join the Investors in the Environment (iiE) accreditation scheme. We work in a stunning building that has won an award⁴⁷ for its eco-friendly design, ranging from solar panels to biomass boilers. But inside the hospital, there was more we could do.



The team at Wear wanted to take on the challenge to see if we could make sustainable choices to match our building's environmental credentials.

The iiE scheme helps businesses like Wear reduce their impact on the environment, save money and become accredited at one of three levels: Bronze, Silver or Green.⁴⁸ It involves creating an environmental policy, having waste management and travel plans, reducing resource use, and completing corporate social responsibility projects, which within Linnaeus have a One Health focus.

After a year we gained Bronze iiE accreditation – and by May 2022 we achieved the top level, Green. Despite the jump in certification, we found small steps made the biggest difference in making us more sustainable.

Starting small

Change does not always need to be made on a grand scale. Introducing bins for waste segregation and recycling, for example, increased our recycling rate by 170%. We have a 'Paws to turn off ' campaign with stickers to remind people to turn off air conditioning and lights. These simple changes have made significant contributions to lowering our carbon footprint.

Individual departments can make their own changes, from the client care team using recycled paper to our clinical team implementing lower flow anaesthesia more widely. To reduce waste, Wear introduced reusable alternatives such as masks and used fewer single-use incontinence sheets, which made a significant financial and environmental impact.

⁶⁶Change does not always need to be made on a grand scale.⁹⁹

Individual equipment also makes a difference. Our audit highlighted how refrigerants from air-conditioning contribute to our CO2 equivalent emissions, which we have addressed through servicing. These small adjustments added up. Despite an increase in staff numbers and equipment, carbon emissions fell by 15%. Wear is also now part of a group renewable electricity contract with other Linnaeus practices and hospitals.

On the journey

Our team has found that smaller, low-friction modifications are also more likely to drive wider culture change. Communicating these wins builds momentum, positivity and a willingness to embrace change. Sharing work amongst our green group – Wear's 'green beans' – boosted collective pride in our achievements.

It was important that our colleagues had access to, and understood, our environmental management policy. A combination of emails, notice boards and verbal updates built engagement, with every accomplishment shared with colleagues. This was a gradual process, taking several months with the pressure of social distancing and busy caseloads. Nonetheless, interest and compliance increased. The iiE scheme also considers social sustainability, including mental health. By focusing on the wellbeing of colleagues and patients as well as the environment, we have installed a patient oasis in the dog walking area. It now features a bench with bee and dog-friendly plants where the team can relax with patients. Our memorial tree scheme with the Yorkshire Dales Millennium Trust has planted over 300 trees.

These measures created a wide ripple effect by making a tangible impact on the team, who have become more mindful of personal choices. Colleagues are now segregating waste, composting and using renewable energy suppliers at home.

Communicating these wins builds momentum, positivity and a willingness to embrace change.

Showing what's possible, demonstrating we are making a difference and recognising these efforts has led to more motivation, inspiration and pride.

Delving into the data

The trickiest part of achieving Green accreditation was gathering the data to gauge our success. A veterinary carbon calculator covers all aspects of resource use and is based on evidence from invoices and regular readings.

The audit pack also takes time to complete, but we are part of a cohort of veterinary practices within Linnaeus making similar changes and we share our experiences to help each other. Our sustainability lead at Linnaeus, Ellie West, advises on the accreditation process and the guidance of the iiE professional sustainability team was also incredibly valuable.

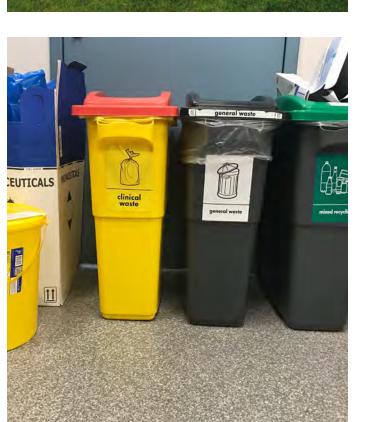
Managing this project was a real learning curve but Wear allocated protected time for a member of our 'green beans' group to complete this work. We also invested in formal training, enabling her to complete an environmental management course.

Next steps

Our biggest challenge remains waste segregation. We have introduced training for new starters, but ultimately it's about accepting that not everyone will remember to switch off lights or recycle every sheet of paper.

As with culture change, improving sustainability will never be a 'job done'. There is always something to improve, another project to start. But small steps continue to make a cumulative difference, and we will continue to take them.









ABOUT THE AUTHOR

Elisa Robinson BSc (Hons) DipAVN DipHE CVN RVN joined Wear Referrals in 2005 as its sole nurse, and played a lead role in the development of the team and hospital to what it is today. She has since progressed into its senior management team, becoming Head of Nursing Services in 2022.

Wear gained Green iiE accreditation in 2022 and won the Overall Outstanding Achiever category at the 2022 iiE Awards. You can also watch the team in action on 24/7 Pet Hospital, which can be viewed on the BBC iPlayer.

Starting the journey: how to integrate sustainability into your organisation



By Ellie West,

RCVS and EBVS® European Specialist in Veterinary Anaesthesia and Analgesia at Davies Veterinary Specialists and Environmental Sustainability Lead for Linnaeus

For anyone looking to make their veterinary practice more sustainable, at first impression the journey can look like a series of small steps. Tracking your carbon footprint, implementing recycling systems, introducing waste management processes – all of these are practical actions that take time and effort but deliver clear results. They are important actions to take; everything we can do as a profession will help to make our planet healthier, happier and safer.



Taking a step back, however, can reveal a much broader landscape for your sustainability journey. The key for your organisation is to decide what can make a meaningful difference and the biggest impact to our environment.

Having become the green lead at Davies Veterinary Specialists, I then progressed into a more central role within Linnaeus, which owns Davies. The question was where to begin within a much larger and more complex business. Easy wins help to build momentum and confidence, but we also needed strategic change across our culture, infrastructure and in clinical practice. In time, our aims evolved from four major projects into a more cohesive five-year strategy covering climate change, waste and pharmaceutical stewardship.

66

Decide what can make a meaningful difference and the biggest impact.⁹⁹

External expertise

During the development of the sustainability strategy, I spoke with a wide range of environmental champions, most of whom are not in the veterinary profession. Gathering advice from experts across a range of sectors, charities and government organisations enabled us to work out what would be achievable for a business the size of Linnaeus – and any challenges we would need to address.

It became clear that I needed to deepen my knowledge of sustainability beyond its application to veterinary medicine. External training provides a crucial wider perspective on how to integrate sustainability into a business, with organisations such as the Institute of Environmental Management & Assessment⁴⁹ providing valuable opportunities for professional development through its green careers hub.

Setting out an environmental management plan provides the basis for a strategic approach while outlining the specific changes needed. Using the ISO 14001:2015 standard for environmental management systems⁵⁰ specifies the requirements for a management system that can enhance an organisation's environmental performance. As well as being applicable to all organisations, regardless of type and size, the standard covers a range of areas from finance to compliance.

Using an external accreditation provider – for Linnaeus, this is Investors in the Environment (iiE) – has also supported our internal objectives. Having sustainability metrics set outside our organisation gives a clear indication we are following best practice rather than guidelines set to our own advantage. Being evaluated by an external specialist provides credibility and buy-in from our teams, clients and stakeholders.

Culture change

My initial priorities have focused on integrating sustainability into the culture of Linnaeus by demonstrating the benefits it would bring to the business. It was critical to winning the support of our senior leadership team and securing the time and resource required to implement change.

This, in turn, could only happen with the buy-in of our practices and support office team – ranging from legal to marketing, finance, communications and facilities.

For our practices, enabling individual teams to gain iiE accreditation through their own environmental management schemes provides the autonomy and freedom to develop a sustainability journey tailored to their own needs. Practice and hospital successes are recognised though a range of communications activities. Igniting the interest and passion from a community of like-minded colleagues has enabled us to share their aspirations, challenges and achievements through internal communications channels, boosting the sense of achievement that would spur further action and engagement.

The support of others

As we began to roll out more sustainability activity, it was critical this did not detract from clinical workloads during busy times. Our practices and hospitals need to focus on providing the highest quality of care, safe in the knowledge that the business is making sustainable choices.

Working in clinical practice can generate a reactive mindset, quickly responding to a wide variety of cases, but sustainability requires a different way of working that focuses on project management, communicating what you are doing and collaborative planning. The solution is prioritisation. What is achievable and will make the biggest impact? What time, resource and investment will it require?

In the clinic, collective expertise makes a huge difference for less impactful waste disposal; reducing procurement emissions from disposable products, systems and services; and using capnography to reduce carbon emissions associated with anaesthesia. For our central teams, dealing with a single, sustainability-minded supplier brings groupwide benefits; for example, supplier-led programmes to heat-map energy consumption patterns.

Igniting the interest and passion from a community of likeminded colleagues has enabled us to share their aspirations.⁹⁹

There can be many barriers on the path to sustainability, such as a lack of metrics, structural capacity, engagement or training. Recognising and removing them will take the effort of more than one person. Bringing others on the journey is vital to making a difference to our environment; with the right strategy and support, it is possible to radically lessen our impact upon the environment.

ABOUT THE AUTHOR

Ellie West is an RCVS and EBVS[®] European Specialist in Veterinary Anaesthesia and Analgesia at Linnaeus-owned Davies Veterinary Specialists in Hertfordshire. After pioneering environmental sustainability at Davies in 2017, Ellie led its green group to achieve Silver accreditation with iiE in 2018, becoming the UK's first veterinary practice to do so.

In 2022, Ellie became an Practitioner at the prestigious Institute of Environmental Management & Assessment, the professional body for those working in the environment and sustainability.

ERINARY

CIALISTS

Ellie was asked to lead environmental sustainability at Linnaeus in 2020. She speaks about the topic at national and international conferences, and within Mars Veterinary Health globally.

26 | TURNING OVER A NEW LEAF - HOW TO MAKE SUSTAINABLE CHANGE IN THE VETERINARY PROFESSION

SUSTAINABILITY 2022

LINNAEUS



engage in our Sustainability Yammer community.



Of our primary care teams have completed a PROTECT poster to address antimicrobial resistance (AMR).



60% of our 72 teams Are members of the Investors in the Environment (iiE) accreditation scheme.



Are accredited by **Investors in the Environment (iiE)** with 32% at **Bronze** level, 8% including our support office at **Silver** and 6% have achieved the highest accolade of **Green**.



We automated **53%** of our gas and electricity meters in 2022 to better understand our energy use.

Davies Veterinary Specialists won **Green Practice of the Year** at the Veterinary Green Awards 2022. Wear Referrals named **Outstanding Overall Achiever** (SME) at the iiE awards 2022.



We Go for Lower Flow campaign trained over 450 VNs and reduced anaesthetic gas purchases by 9% from 2021-2022.

Introduced a salary sacrifice scheme for **electric vehicles**.



Our strategy aligns with the **Mars Veterinary Health 2025 sustainability approach** which focuses on climate change, waste reduction and pharmaceutical stewardship.





Of our 205 operational sites have dry mixed recycling collections.



Preferred green products supplier list available for medical and domestic equipment and consumables.

CONTINUED



Introduced an antibiotics amnesty in November 2022 and reduced our antibiotic purchases by 15% in 2021-22.



Page 7: Addressing antimicrobial resistance through evidence and awareness

- Cassini, A. et al. Attributable deaths and disability adjusted life-years caused by infections with antibiotic-resistant bacteria in the EU and the European Economic Area in 2015: a populationlevel modelling analysis. Lancet Infect. Dis. 19, 56–66 (2019).
- Antimicrobial Resistance Collaborators. Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. Lancet Lond. Engl. 399, 629–655 (2022).
- O'Neill. Tackling drug-resistant infections globally: final report and recommendations. HM Government and Wellcome Trust (2016). <u>https://amr-review.org/</u>
- McEwen, S. A. & Collignon, P. J. Antimicrobial Resistance: a One Health Perspective. Microbiol. Spectr. 6, (2018).
- Marshall, B. M. & Levy, S. B. Food animals and antimicrobials: impacts on human health. Clin. Microbiol. Rev. 24, 718–733 (2011).
- 6. Thanner, S., Drissner, D. & Walsh, F. Antimicrobial Resistance in
- Agriculture. mBio 7, e02227-02215 (2016). 7. Economou, V. & Gousia, P. Agriculture and food animals as a source of antimicrobial-resistant bacteria. Infect. Drug Resist. 8, 49–61 (2015).
- Weese, J. S. & van Duijkeren, E. Methicillin resistant Staphylococcus aureus and Staphylococcus pseudintermedius in veterinary medicine. Vet. Microbiol . 140, 418-429 (2010).
- 9. European Commission. Options for a strategic approach to pharmaceuticals in the environment. European Commission (2018). https://op.europa.eu/en/publication-detail/-/ publication/5371e7bd-25db-11e9-8d04-01aa75ed71a1/language-en.
- Bengtsson, B. & Greko, C. Antibiotic resistance- consequences for animal health, welfare, and food production. Ups. J. Med. Sci. 119, 96–102 (2014).
- Allerton, F. Prescription rebellion: reduction of antibiotic use by small animal veterinarians. J. Small Anim. Pract. 61, 148-155 (2020).
- White, A. & Hughes, J. M. Critical Importance of a One Health Approach to Antimicrobial. Resistance EcoHealth 16, 404–409 (2019).
- 13. Weese, J. S. Infection control in veterinary practice; the time is now. J. Small Anim. Pract. 52, 507–508 (2011).
- 14. Espinosa-Gongora, C. et al. Towards a Better and Harmonized Education in Antimicrobial Stewardship in European Veterinary Curricula. Antibiot. Basel Switz. 10, 364 (2021).
- www.bsava.com/resources/veterinary-resources/protect-me/.
- 16. Allerton, F. et al. Overview and Evaluation of Existing Guidelines for Rational Antimicrobial Use in Small-Animal Veterinary Practice in Europe. Antibiotics 10, 409 (2021).
- Marks et al. Enteropathogenic bacteria in dogs and cats: diagnosis, epidemiology, treatment, and control. J Vet Intern Med 25, 1195-208 (2011).
- Unterer, S. et al. Treatment of aseptic dogs with hemorrhagic gastroenteritis with amoxicillin/clavulanic acid: a prospective blinded study. J. Vet. Intern. Med. 25, 973–979 (2011).
- 19. Ortiz, V. et al. Evaluating the effect of metronidazole plus amoxicillin-clavulanate versus amoxicillin-clavulanate alone in canine haemorrhagic diarrhoea: a randomised controlled trial in primary care practice. J. Small Anim. Pract. 59, 398–403 (2018).
- Smith et al. Pet owner and vet interactions: exploring the drivers of AMR. Antimicrob Resist Infect Control 2, 46 (2018).
- No antibiotic required 'non prescription' form. BSAVA (2018). <u>https://www.bsavalibrary.com/content/chapter/</u> <u>10.22233/9781910443644.app15</u>.
- 22. <u>https://rumacae.org.uk/vet-antibioticamnesty;</u>
- <u>https://knowledge.rcvs.org.uk/amr/antibiotic-amnesty</u>.
 23. Vellinga, A. et al. Public practice regarding disposal of unused medicines in Ireland. Sci Total Environ. 478, 98–102 (2014).

Page 10: Putting waste reduction into practice

- Health care climate footprint report. Health Care Without Harm (2019). <u>https://noharm-global.org/</u> documents/health-care-climate-footprint-report.
- West, E. & Gough, S. 10 tips for sustainable procurement. Vet Record 187, 3 (2020).
- 26. Rizan C. et al. Plastics in healthcare: time for a re-evaluation. J R Soc Med 113, 49-53. <u>https://journals.sagepub.com/doi/10.1177/0141076819890554</u>.

- Naumann, D.N., et al., The Bouffant Hat Debate and the Illusion of Quality Improvement. Ann Surg, 2020. 271(4): p. 635-636.
- Markel, T.A., et al. Hats off: a study of different operating room headgear assessed by environmental quality indicators. J Am Coll Surg 225, 573-581. (2017).
- Kagoma, Y. et al. People, planet and profits: The case for greening operating rooms. CMAJ 184, 1905-1911 (2012).
- Vozzola, E. Overcash, M. & Griffing, E. An Environmental Analysis of Reusable and Disposable Surgical Gowns. AORN J. 111, 315-325 (2020).
- Angelucci A. et al. Smart Textiles and Sensorized Garments for Physiological Monitoring: A Review of Available Solutions and Techniques. Sensors 21(3), 814 (2021).
- Mahase, E. Sixty seconds on . . . gloves off, BMJ 366:14498 (2019) www.bmj.com/content/366/bmj.14498.
- 33. Lindberg, M., Skytt, B., Lindberg, M. Continued wearing of gloves: a risk behaviour in patient care. Infection Prevention in Practice. 2 (4), 100091 (2020).
- 34. Dunn H, L.A., & Wilson N. The 'gloves are off' can we reduce inappropriate glove usage through an educational based intervention and risk assessment? 2019. www.his.org.uk/media/1757/193.pdf.

Page 13: The value of environmental accreditation

35. A blueprint for a green workforce transformation. IEMA and Deloitte (2022). <u>https://www2.deloitte.com/uk/en/pages/</u> <u>consulting/articles/green-skills-for-green-economy.html</u>

Page 19: Behaviour change for sustainability

- **36.** Sixth Assessment Report. IPCC (2022). <u>www.ipcc.ch/</u> <u>assessment-report/ar6/</u>
- Bunderson, C.V. The Validity of the Herrmann Brain Dominance Instrumen. PhD dissertation published by Herrmann International (1985).
- United Nations. IPCC report: 'Code red' for human driven global heating, warns UN chief (2021). https://news.un.org/en/story/2021/08/1097362
- 39. Steelcase. Wellbeing: A Bottom Line Issue How Feeling Good At Work Drives Business Performance. 360 Exploring workplace research, insights and trends, pp. 10-69 (2014). www.steelcase.com/ research/articles/topics/wellbeing/wellbeing-a-bottom-line-issue/.
- **40.** Wellness and Productivity Management. Sims, J. (2010). Health and Productivity Congress.
- Business Case for Well-Being: The 'Why' Behind Well-being. Building a strong and strategic business case for employee well-being programs. Benz Communications and Virgin Pulse (2015). <u>https://community.virginpulse.com/bizcase</u>.
- 42. Sick at Work: The cost of presenteeism to your business and the economy. Medibank (2011). <u>www.medibank.com.au/content/</u> <u>dam/client/documents/pdfs/sick_at_work.pdf</u>.
- Hermann, N. & Herrman-Nehdi, A. The Whole Brain Business Book, 2nd edition. McGraw Hill (2015).
- 44. Tame Your Brain (2023). <u>https://kemkaran.com/tame-your-brain</u> _<u>-to-find-your-flow/</u>
- 45. Pink, D. Drive: The Surprising Truth about What Motivates Us. Canongate Books (2011).
- 46. Csikszentmihalyi, M. Flow The Psychology of Optimal Experience, Harper Perennial Modern Classics (1990).

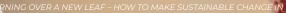
Page 21: Taking the leap: how we achieved top accreditation

- 47. Winner of the Climate Change, Built Environment and Outstanding categories at the 2015 County Durham Environment Awards. <u>https://issuu.com/dccdesignandprint/docs/dcc_envawards</u> <u>winners_2015</u>
- **48.** Our award levels. Investors in the Environment (2023) www.iie.uk.com/register/award-levels

IARY PROFESSION

$\ensuremath{\textbf{Page 25:}}$ Starting the journey: how to integrate sustainability into your organisation

- 49. The Institute of Environmental Management and Assessment (IEMA) (2023). <u>www.iema.net/</u>.
- 50. ISO. ISO 14001:2015 Environmental management systems Requirements with guidance for use (2021). www.iso.org/standard/60857.html.



1 No 14

ACKNOWLEDGEMENTS

With thanks to everyone who contributed to Turning Over a New Leaf – How to Make <u>Sustainable</u> Change in the Veterinary Profession:

- Margo Mosher, Global Sustainability Director at Mars Veterinary Health
- Sue Paterson, RCVS Junior Vice-President and RCVS Council Lead for Environment & Sustainability
- Fergus Allerton, RCVS & EBVS[®] European Specialist in Small Animal Internal Medicine at Willows Veterinary Centre & Referral Service
- Zoë Halfacree, RCVS & EBVS[®] European Specialist in Small Animal Surgery at Davies Veterinary Specialists and a Director of Vet Sustain
- April Sotomayor, Principal Consultant for Investors in the Environment (iiE)
- Ben Baker, Facilities and Client Care Co-ordinator at Blacks Vets
- Diane Royle, RVN at Donnachie & Townley (D&T) Veterinary Centre
- Libby Kemkaran, Neurocoach and Director of Kemkaran Consulting Limited and Vet Sustain
- Elisa Robinson, Head of Nursing Services and green lead at Wear Referrals
- Ellie West, RCVS and EBVS® European Specialist in Veterinary Anaesthesia and Analgesia at Davies Veterinary Specialists

The report was compiled by Rebecca Bannister and designed by Ian Hughes.

www.linnaeusgroup.co.uk/about-us/sustainability www.linnaeusgroup.co.uk/careers

The views or opinions expressed in this report are solely those of the authors involved and do not necessarily represent those of Linnaeus Veterinary Limited.

LINNAEUS

Friars Gate, 1011 Stratford Road Shirley, West Midlands B90 4BN T 0121 712 7050 E <u>enquiries@linnaeusgroup.co.uk</u>

<u>linnaeusgroup.co.uk</u>

LINNAEUS