

Welcome to Darwin Veterinary Centre's Winter / Spring Newsletter. This issue brings you advice on managing arthritis in cats and dogs, keeping your rabbit or guinea pig cosy through the colder months, the second of a two-part article on preventing parasites in chickens, as well as information on preventing antibiotic resistance in pets and humans alike. This issue also contains a feature article on ear disease, together with exciting news in our regular Darwin Court Circular, and new feature, a pet product review.

It's been great to hear your thoughts and feedback from the previous issues, so please keep them coming, and don't hesitate to contact Sonya if you have any ideas for subjects you'd like us to cover. We hope you enjoy this issue!

Preventing Antibiotic Resistance in our Pets

Antibiotic-resistance is now one of the greatest challenges facing human medicine. However, it doesn't only affect us, but also our pets. Antibiotic-resistant bacteria develop when bacteria are treated with inappropriate antibiotics, or with the right antibiotic at inappropriate levels. Our practice vets always endeavour to select the most appropriate antibiotic for each individual patient and each infection, but have you ever asked yourself what you can do to safeguard your pet against antibiotic resistance?

- Antibiotics should always be taken right to the end of the course, and not just until the infection appears to have improved. This doesn't only apply to tablets, but also to prescribed ear and eye medications. Squirting a previously prescribed ear medication into a pet's ear once in a while when they seem uncomfortable, will quickly render that antibiotic useless to your pet, and reduce the likelihood of the ear infection being cured.
- Do not be tempted to share antibiotics between pets or re-use tablets which were prescribed for an earlier illness, as they may not be appropriate for your pet's current condition, and could even be toxic for certain patients. Ear and eye medications should always be discarded once opened longer than 30 days.
- Taking antibiotics at the appropriate intervals ensures that they reach the most effective dose within your pet's body. Ideally, once-a-day medication should be given at the same time each day, whilst twice and three-times daily medications should be given every 12 and 8 hours respectively, to avoid exposing bacteria to a sub-optimal dose of antibiotics.
- Antibiotics are not always the answer, as not every infectious disease improves with antibiotic treatment (for example viral infections). Please don't demand antibiotics, if your vet advises against them.

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Managing Arthritis in dogs and cats

Arthritis is present in most cats and dogs from a surprisingly young age, typically 2 yrs+. It is the term used to describe inflammation of the joint, which occurs when joint cartilage is worn away, resulting in discomfort and the formation of rough new bone around the joint. Arthritis can be primary (without an obvious underlying cause) and is often seen in middle aged to older pets, but it can also develop in younger animals secondary to any kind of joint injury e.g. fractures, dislocations, or joint malformations such as hip or elbow dysplasia. Regardless of the cause of arthritis, there are three important factors in its management:

Weight management Probably the most important thing you can do for any animal with arthritis, is to ensure that they are at their ideal weight. Carrying extra weight gives the joints more work to do, resulting in increased wear and discomfort. If you are unsure whether your pet would benefit from weight loss, or unsure how to go about this, then speak with nurse Alice, who runs our free-of-charge weight clinics – more on page 3.

Exercise Initially, if arthritic joints are very sore, rest is important to prevent further damage and reduce the pre-existing inflammation. However, for dogs, regular controlled exercise should be introduced as soon as possible to maintain joint mobility. The aim is to find a level that the dog can cope with on a regular basis, without causing stiffness afterwards. What must be avoided is relative inactivity during the week then a longer run at the weekend - a lot of pain and stiffness on Monday will be the inevitable result!

For cats, minor alterations to your cat's amenities can make a large improvement in quality of life. This can include ensuring that your cat can easily reach their favourite bed without jumping, by introducing steps up to higher levels, raising food and water bowls a few inches off the ground to remove discomfort caused by bending down to eat or drink, and by ensuring your pet's litter tray doesn't have prohibitively high sides to step over, and contains litter which is stable to walk upon (ideally not pellets).

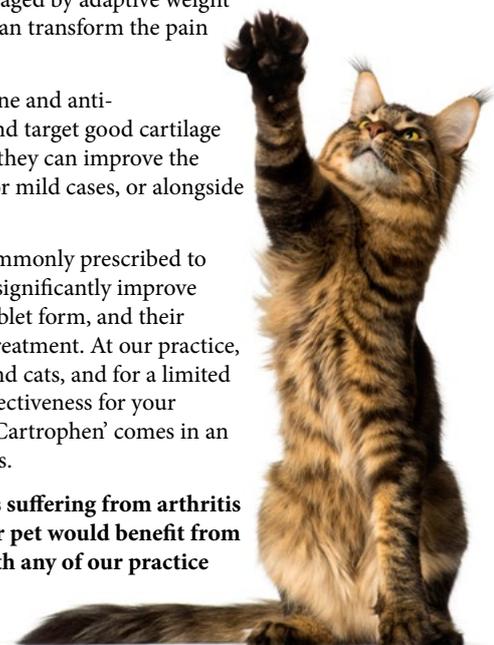
Medications When arthritis can no longer be managed by adaptive weight and exercise alone, a range of medications exist that can transform the pain caused by joint inflammation.

Joint supplements containing chondroitin, glucosamine and anti-inflammatory ingredients are now widely available, and target good cartilage production and maintenance. When used long term, they can improve the symptoms of arthritis, especially when used in early or mild cases, or alongside medications such as NSAIDs.

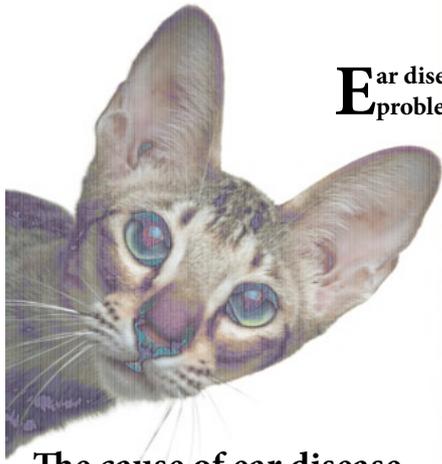
Non-steroidal anti-inflammatories or NSAIDs are commonly prescribed to reduce inflammation and pain within the joints, and significantly improve quality of life. They are available in both liquid and tablet form, and their benefits are usually seen within the first 48 hours of treatment. At our practice, we usually prescribe 'Loxicom' liquid for both dogs and cats, and for a limited time are offering a free trial so that you can test its effectiveness for your pet – see below for further details. Another NSAID, 'Cartrophen' comes in an injectable form, and is more suitable for some patients.



If you are unsure whether your pet is suffering from arthritis or would like advice on whether your pet would benefit from a free Loxicom trial, please speak with any of our practice vets.



Ear Disease in our Pets



Ear disease, or 'otitis externa', is very common in both cats and dogs, and can be an immensely frustrating problem for pet and owner alike. The problem may affect one or both ears depending upon the cause, but the symptoms tend to be the same, and may include:

- Unpleasant odour and discharge from ears
- Scratching and rubbing ears on the floor
- Head shaking
- Reluctance to permit the ears to be touched or crying when stroked
- Holding ears at an odd angle
- Ears may be red and warm to the touch
- Head tilt
- Depression and lethargy
- Apparent deafness

The cause of ear disease

The causes of ear disease are numerous and vary between breeds, and between the life styles of individual animals. Sadly some breeds are particularly prone to recurrent ear conditions, while others remain remarkably unaffected.

Parasites – Ear mites are a common cause of discharge and itching in kittens and puppies, and occasionally in adult animals. On rare occasions sarcoptes and demodectic mites, and lice can cause ear disease.

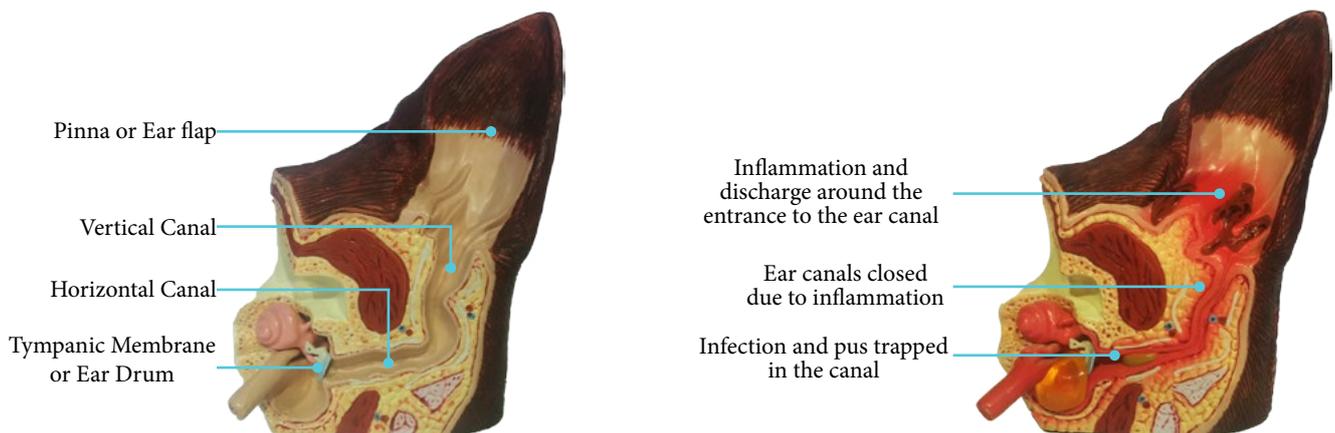
Foreign bodies – Grass seeds which have entered the ear canals are a common problem throughout the Summer months, when dogs may be running in long grass. Other foreign bodies are occasionally seen also.

Hormonal Diseases – Hormonal diseases such as hyperthyroidism in cats, or hypothyroidism in dogs, together with diabetes in both species, are a frequent underlying cause of ear infections.

Swimming – Dogs which swim or get water in their ears when bathing are more at risk of ear problems, particularly in older pets. As such, working breeds such as Labs and Retrievers, as well as breeds which are regularly bathed, such as Poodles, are over represented.

Allergies – An amazing 70% of all ear disease is triggered by an allergy! The lining of your pet's ears is a continuation of normal skin, so any condition which affects the skin, can also affect the ears. Allergies may be to food, products within the home, materials that your pet's skin comes into contact with, or very commonly, to something in the natural environment, such as grass or tree pollen, house dust mites, moulds or flea saliva. Typically, pets with allergies will have inflammation on other parts of their body, and excessively lick or chew their paws. Breeds predisposed to allergies include: Labradors, Golden Retrievers, Westies, Dalmatians, Setters, Staffies, and Bulldogs.

Anatomy – The anatomy of a dog's ear plays a major role in predisposing some breeds to ear disease. Bulldogs, Pugs and Shar Peis have very narrow ear canals; Poodles and Bichon Frises (and their crosses) have excessively woolly and hairy ear canals; whilst Spaniels and Hounds have pendulous outer ears. Each of these anatomies reduces the normal air flow or ventilation of the ear canals, and result is a warm, moist environment, which is ideal for the growth of bacteria and yeasts.



Diagrams of the ear, showing both a normal healthy ear (left) and the changes which occur with ear disease (right).

Diagnosis of ear disease

The symptoms of ear disease are often suggestive of a problem, but to treat the problem most efficiently and to prevent reoccurrence it is important to identify the precise disease as well as any underlying causes or triggers.

Initially an auroscope is used to examine inside your pet's ear(s), if the ear is not too inflamed and painful. Cytology is then performed on any discharge present, by sampling a small amount with a cotton bud, and examining it under a microscope. This provides useful information about the presence of bacteria or yeast within the ears, as well as about the body's immune response. Many bacteria can be identified from this in-house cytology, but sometimes we need to send away a swab for an external lab to identify the bacteria present, and to determine which antibiotics are best for your pet. This is known as performing 'culture and sensitivity' testing.

If an underlying cause of ear disease is suspected in your pet, then additional tests may also be employed to diagnose these conditions, such as hormonal or allergy blood tests.

Treatment of ear disease

Whatever the cause of your pet's ear disease, treatment has three main goals: to remove the underlying cause, to clean the ear of discharge and reduce inflammation, and to reduce the occurrence of further problems. Some problems may be rapidly and quickly resolved, whilst others require lifelong management.

1. Removal of the underlying cause of otitis externa

This may involve regular plucking of hair from your pet's ears, stopping them swimming in dirty or chlorinated water, correcting under or overactive hormonal levels, reducing sensitivity to allergies (a whole other article in itself!), or treating to remove parasites.

2. Cleaning the ear of discharge, and reduction of inflammation

Usually, discharge can be removed from the ear using an appropriate proprietary ear cleaner correctly. This involves squirting the cleaner into the ear, massaging the canals to dissolve the discharge into the cleaner, then removing the cleaner from the ear using cotton buds and cotton wool. If the ear is too painful for your pet to permit cleaning, sedation or occasionally general anaesthesia may be used to thoroughly clean the canals right down to the ear drum. In such instances, the ears are additionally flushed with copious volumes of sterile saline. As most

ear conditions involve inflammation of the ear canals, anti-inflammatory analgesics are regularly prescribed for these cases. Where appropriate, antibiotic medication in liquid form may also be prescribed to be instilled into the ears, usually twice a day, for a short course.

Occasionally, but unfortunately increasingly, we see cases of otitis externa involving bacteria which are resistant to many antibiotics, such as *Pseudomonas aeruginosa*. Because neither oral medications nor antibiotic ear drops are effective on such bacteria, these cases usually undergo a general anaesthetic for acid flushing of their ear canals – a costly and moderately invasive procedure. When otitis externa has been present for many years, or the pet's anatomy is severely abnormal, surgery may be the only option for managing the discomfort of intractable ear disease. However, this is usually a last resort, as this type of surgery can be highly invasive and can carry a high complication rate.

3. Reducing the occurrence of further problems

As with most things in life, 'prevention is better than cure', and subtle changes in how you care for your pet, can reap huge rewards in preventing otitis externa. If your pet has a tendency for lots of hair in their ear canals, then plucking this regularly greatly increases canal ventilation, decreasing the occurrence of disease. Keeping your pet out of long grass at the height of Summer reduces the likelihood of sharp grass seeds or awns entering the ear canals and perforating the ear drum. Similarly, preventing water from entering the ear during bathing or swimming, will reduce the reoccurrence of ear problems.

However, if your pet has already had a bout of ear disease, the single most important thing which you can do to prevent reoccurrence, is to clean your pet's ears regularly, typically once a fortnight. Using the right product for your pet's condition and employing the right cleaning technique are important – as is a compliant pet! So, ensuring your ear cleaner is appropriate, in date, and opened less than 6 months, that you are confident of your technique and that you reward your pet immediately afterwards are all vital to achieving a clean and healthy ear!

Registered Veterinary Nurse Andrea Rogers runs regular ear clinics throughout the week, and is always happy to review ear problems and demonstrate successful ear cleaning free of charge. Please don't hesitate to call her!



The same ear before and after hair plucking.

Weight Clinics

Does your pet need a bit of extra help to lose a few kilos? If so then Alice is here to help! Alice has been running weight clinics with great success for the past year, and is here to give free, tailored information and advice on a regular basis to help your pet achieve their ideal weight.



Did you know, overweight animals are at increased risk of:

- Clinical signs of arthritis
- Diabetes mellitus
- Heart disease
- Breathing problems
- Intolerance to heat
- Low resistance to infection

Getting your pet to their ideal weight will therefore improve his or her quality of life and could add years to their lifespan. If you would like to make use of this free service, please phone to book an initial 30 minute consultation with Alice.



Kylie lost 6kg earlier this year with Alice's help

Product Review

SureFlap Microchip Pet Door £59

This cat flap is activated by your pet's microchip and so ensures that only your pet(s) can enter your home. Our vets frequently recommend it for patients who are being terrorised by a neighbouring cat to keep out the intruder, allowing your cat to feel safe and less stressed within their home territory. It is easy to install, is suitable for even very large cats (and small dogs), and comes complete with a comprehensive manual. The flap has all the usual settings, as well as permitting you to set a curfew in the evening, and automatic release at your chosen time in the morning – great for Sunday morning lie ins!



Fun Feeder 'Slow' Dog Bowl £13

These dog bowls are great for feeding tinned or dry food to dogs who bolt their dinners, as the intricate shape slows them down. They're made of durable, dishwasher-safe plastic, don't slip or slide around, are available in a variety of sizes and colours, and ensure that your dog will eat at a more natural pace, helping to avoid bloat, over eating and hiccups caused by bolting food.



Darwin Court Circular

Romance is in the air at the practice at the moment, with the announcement of not one, but two engagements! Lewis, vet Chloe's partner of six years, proposed to her on a beach in Crete on a recent holiday, and a fortnight later, Mitchell, nurse Alice's partner of seven years, also proposed on a beach, in Cornwall. Everyone at the practice is delighted by their news, and wishes all four of them every happiness for the future.



We are also celebrating Terri's 10 year anniversary at Darwin Veterinary Centre. Terri came for interview with the practice on the day of her 21st birthday, showing even then that she was committed to a career in veterinary nursing. She excelled through college, gaining her Registered Veterinary Nursing qualifications in 2009, and since that time has become a much-valued and respected member of our team. She was instrumental in the practice achieving the ICC 'Gold' Cat-Friendly accreditation in 2014, and remains both our Diabetes Liaison Officer and our Cat Advocate. Those of you who know Terri will, I am sure, wish to join with us in wishing her many congratulations!

Preventing Antibiotic Resistance *(continued from front page)*

- People's hands are the most common way of spreading bacteria, and unfortunately that includes those which carry antibiotic resistance. To avoid spreading MRSA and MRSP (methicillin-resistant staphylococcus aureus and staphylococcus pseudointermedius) always wash your hands before and after administering oral medications such as tablets and capsules.

To slow down the development of antibiotic resistance both for ourselves and for our pets, it is important to use antibiotics in the right way. We are living in the 'golden age' of antibiotics and take our ability to cure common bacterial conditions in our pets (and in ourselves) as the norm; lets act together to keep it that way.



Chicken Parasites: Part 2 – Internal Pests

In the last newsletter we looked at 'ectoparasites', parasites which live externally on chickens, however there is also a whole range of 'endoparasites', parasites that we cannot see that may be living internally too! This article will focus on these, and how to treat them.

Intestinal Worms There are many varieties of common intestinal worms, including capillaria, heterakis, ascarids and tapeworm. Regardless of variety, all tend to cause failure to thrive, +/- weight loss, reduced egg laying and even lameness, and in high numbers they may even cause fatal impaction of the intestines. **Gapeworms** are less frequently seen, and differ by living in the bird's windpipe or trachea. Their presence can cause impaired breathing, breathing through a beak held open, or the chicken may even gasp with their throat extended.

As with much in life, 'prevention is better than cure' when it comes to internal parasites. Moving your chicken coop regularly, or replacing or jet-washing the run's substrate will help to prevent a build up of worm eggs in your bird's environment. Keeping grass in the run short permits UV light to destroy worm eggs on the ground too. Another practical measure to prevent intestinal worms from colonising your chickens, is to alter your bird's drinking water 1 week in every 4, by mixing 20 mls of cider vinegar into every litre of drinking water – but take care not to feed this in a galvanised container. However, which ever method you choose, your chickens should still be de-wormed regularly using Flubenvet, the only licensed medicinal product. It is available as either a powder to mix into your bird's feed, or comes in a pre-mixed form, and should be fed for 7 consecutive days. It should be noted that there is a 0 day egg withdrawal and 7 day meat withdrawal period for this product, which is available at the practice.

Coccidia is a protozoal parasite that causes disease within the gut, which is usually accompanied by diarrhoea +/- blood. However, low level infections can go unnoticed, causing only poor growth and failure to thrive. Infection is generally due to poor hygiene and husbandry, and may be exacerbated by environmental factors, e.g. cold, overcrowding and poor ventilation.



Over wintering bunnies and guineas

Although rabbits and guineas are immensely adaptable in the wild, it's a different story when they live in a confined space and can not physically move away from adverse weather conditions. So here's our ten point plan to protect your pet from the unpredictable British Winter.



1. **Wind** – Strong winds may upset bedding and food inside the hutch, not to mention your pet, so move the hutch to a sheltered spot
2. **Damp** – Sadly, many hutches are made from thin plywood, allowing rain to soak through. It's easy to weatherproof the back and sides by nailing on four inch feather-edge board.
3. **More Damp** – Filling tiny cracks and holes in the hutch with putty or builders' caulk will keep out rain, melting snow and ice.
4. **Rain** – Driving rain can easily penetrate the hutch, making bedding, food and your rabbit or guinea pig wet. Try making a simple canopy from a sheet of plywood that can be held in place by bricks or other heavy objects.
5. **Snow** – Snow can be a big problem, especially if it drifts. Ensure your pet's hutch is raised at least 30cm off the ground to minimise the risk of it becoming snow-bound, and clear any snow from the roof and around the hutch at least once a day.
6. **Frost** – As frosts typically don't occur within half a metre of houses, relocating your hutch against the exterior wall of your house should proof it against frost.
7. **Cold** – Clad your hutch with old carpet when the weather is particularly cold. A few pieces covering the roof, back and sides will insulate the hutch.
8. **Freezing** – Fresh water is essential, and to prevent freezing it should be changed at least twice a day. Don't forget to check the water is flowing through the spout too. Two or three drops of culinary-grade glycerine (available at Chemists and larger Supermarkets) can be added to bottles to prevent water from freezing.
9. **Insulation** – Provide lots of extra bedding, and don't forget to clean it out daily. Be generous with hay, straw and shredded paper. These are great insulators and will keep your pet nice and snug.
10. **Food** – Extra food will help your pet produce natural defences against the cold - increased fur growth and increased body mass. But don't forget to reduce the amount when Spring arrives!

