

Farm news

September 2026

A cautionary tale for yew...

By Sophia Crockford



The following case study is shared with the kind permission of the farmer. On a cold winter's morning, we received an early out-of-hours call from one of our local beef farmers.

For some background information, he runs a suckler herd, with the cows, calves and stock bull turned out during the day and housed overnight. The cattle are fed a forage-based ration, supplemented each morning with a measured amount of barley-based cattle mix before being turned out.

That morning, the farmer had arrived at the shed to find one of his cows dead. The straw around her was heavily disturbed, suggesting she had been thrashing around before she died.

As he checked the rest of the herd, the scale of the problem quickly became apparent. Most of the cattle, including the stock bull, were staggering around the pen and appeared particularly unsteady on their hind limbs. He noticed they appeared dull, depressed and slow to respond to their surroundings so called for an urgent out-of-hours visit.

During the vet visit, several animals visibly deteriorated. Some started laying down and began to regurgitate green material, while others showed signs of abdominal pain by kicking at their flanks, grinding their teeth and repeatedly straining as if to defecate.

The clinical picture and scale of the problem strongly suggested a poisoning, but identifying the source was the next challenge.

We set off to inspect the fields, splitting up to cover as much ground as possible looking for anything amiss that could explain why the cows were so sick. The mystery was solved when the farmer discovered a large pile of recently discarded yew and rhododendron trimmings in the corner of one of the grazing fields. The cows, being curious by nature, had unfortunately thoroughly investigated this new addition to their pasture and were now suffering the consequences of two serious toxicities at once.



Figure 1 - Yew and rhododendron from the rumen.



Figure 2 - Suspect rhododendron leaf.
Photos from the Nottingham pathology report for this case.

Rhododendron is an invasive ornamental shrub found in gardens and wooded areas. Poisonings arise when animals inadvertently gain access to gardens (goats are notorious for this), or when cuttings are mistakenly thrown into livestock fields.

An interesting historical footnote is that rhododendrons are thought to have been responsible for one of the earliest recorded uses of chemical warfare. King Mithridates VI of Pontus reportedly left toxic "mad honey", produced by bees feeding on *Rhododendron ponticum*, along the route of the invading Roman army. After consuming the honey, the poisoned soldiers became incapacitated, allowing the cunning Mithridates and his forces to defeat them.

- Turner, M.D. (2023), 'Mad Honey and the Poisoner King: A Case of Mass Grayanotoxin Poisoning in the Roman Military', *Cureus*, 15(4)



Mechanism of toxicity

All parts of the plant, especially the leaves, contain grayanotoxins, which disrupt cellular sodium channels on neurons (nerves), myocytes (muscles), and cardiomyocytes (heart muscle). This slows the heart and dangerously lowers blood pressure when ingested, as well as causing disruption of normal gastrointestinal and neurological functions. The toxic dose of rhododendron is approximately 0.2% of bodyweight in sheep and cattle, equivalent to 1.2kg of foliage in a 600kg cow, and just 140g in a 70kg sheep.

Symptoms

Affected animals commonly present with colic (abdominal pain), hypersalivation, ruminal stasis and bloating within a few hours of ingestion. Vomiting is considered pathognomonic in ruminants (i.e. if a ruminant vomits, it almost definitely has rhododendron poisoning!). As toxicity progresses, tremors, ataxia (appearing drunk), weakness and recumbency may develop, with severe cases progressing to collapse and death.

Treatment

There is no specific antidote for rhododendron poisoning. If the poisoning is caught before the animal is showing signs of toxicity, rumenotomies can be performed where the rumen is surgically opened to remove the plant material and prevent the toxins being absorbed. However, once the animal is displaying clinical signs treatment is purely symptomatic to stabilise the animal. This may include a combination of pain-relief, fluids to support blood pressure, activated charcoal, B-vitamins and anti-spasmodics. Antibiotic treatment may be recommended to reduce the risk of aspiration pneumonia after uncoordinated regurgitation.



Continued... Yew (*Taxus baccata*)

I'm sure you will recognise the distinctive dark green needles and bright red berries of the yew tree, a native evergreen found throughout the UK. Many of the UK's oldest yews are found in churchyards, often predating the churches themselves.

Mechanism of toxicity

The leaves (needles), bark, roots and the seeds contained within the berries all contain toxic taxine alkaloids. Taxines interfere with the normal movement of sodium and calcium ions within cardiac muscle, disrupting the heart's electrical conduction system. This leads to severe cardiac arrhythmias, circulatory collapse and, ultimately, cardiac arrest.

The estimated toxic dose of English yew is approximately 0.5 g per kg bodyweight. For a 600 kg cow, this equates to around 300 g of plant material. In a 70 kg sheep, as little as 35 g can be fatal. Wilted material remains highly toxic, so even cut branches left for several days continue to pose a significant risk.

Symptoms

In many cases, the first and only sign is sudden death, making yew poisoning an important differential diagnosis whenever multiple animals are found dead unexpectedly. Animals that survive long enough to show clinical signs may display muscle tremors, weakness, staggering, difficulty breathing, collapse and convulsions before death. Because sudden death is such a prominent feature, it is also important to consider and rule out other causes, including anthrax and lightning where appropriate.

Treatment

Sadly, there is no specific antidote to yew poisoning. Treatment is limited to supportive care, but because the toxin acts so rapidly, affected animals are often found dead before any intervention is possible. The best approach is prevention: ensure that yew trees are inaccessible to livestock and never dispose of hedge or garden clippings into grazing fields.

This case has an ending that was happier than feared as, despite the odds, the farmer suffered no further casualties and over the next few days the herd slowly recovered from their brush with death!

If you ever discover unknown plant or tree cuttings in a grazing field, or spot unfamiliar plant material in your hay or silage, it is important to identify it as quickly as possible. Google lens or the Woodlands Trust Tree ID app are both excellent, free resources for rapidly identifying many common tree species and can provide valuable information to help us assess the potential risk to your livestock. Early identification of toxic plants can be crucial in guiding treatment decisions and preventing further losses. Remember, prevention is better than cure.

- 1) **Securely fence** trees or shrubs with known toxin potential to prevent access from livestock.
- 2) **Regularly walk** all fields being grazed by livestock, especially those near roads or public footpaths to check for any discarded plant material or hazardous objects (i.e. lead batteries) before toxin ingestion occurs.
- 3) **Ensure adequate forage** is available especially during periods of poor grazing or snow coverage as hungry animals are more likely to eat unpalatable plants.

Welcome Lydia!



Hi, I'm Lydia. I graduated from the University of Nottingham and began working at Scarsdale vets at the start of August. I enjoy working with both commercial and small holder clients, having been brought up on a sheep farm in East Yorkshire, I do have a particular soft spot for sheep! In my spare time I try to spend as much time outdoors as possible, running, walking, and camping. I am really looking forward to working with and meeting many more clients soon!

Badger meeting update By Carolyn Baguley



We were really pleased to host a meeting on Monday 17th August with Lindsay Heasman from the Badger Vaccination Field Force. Lindsay discussed the success of the badger vaccination scheme in East Sussex, where bovine TB breakdowns, due to badgers on farm, have significantly reduced. The vaccine reduces the rate of new infections in badgers - when more than a third of a badger social group is vaccinated, the risk to unvaccinated cubs drops by 79%, making it a sustainable control measure.

DEFRA have announced funding to expand the project to more High Risk and Edge areas of England. The funding covers the cost of 4 days' training for individuals to be able to set survey, trap and vaccinate the badgers, wages for "field staff" once trained, and the vaccine itself. Field staff will visit each farm signed up to the scheme on 12 consecutive days to bait train the badgers, before vaccination on the final 2 mornings, working alongside farmers who also wish to be involved.

If our area is not selected for the next phase of funding from DEFRA, it still will be possible to vaccinate the badgers on your farm for bTB if you acquire a licence to trap and vaccinate the badgers yourselves. We are keen to work alongside farmers on vaccination days.

We think this is a great opportunity to combat bTB on farms where badgers are a known source of infection, alongside biosecurity measures already in place.

The next three areas to receive funding will be announced by Defra in mid-September, and their decision will be based on interest as well as risk.

We encourage everyone who is interested in vaccinating the badgers on their farm to register their interest ASAP on the Badger Vaccination Field Force website (bvff.co.uk) under the landowner section (please note this is also open to tenant farmers).

For people wanting to learn more about this exciting project, there is lots of information on bvff.co.uk.



Join us for our Practice Client Evening

Date: 1st October 2026 Time: 7:00pm - Venue: Scarsdale Vets - Markeaton Lane, Derby, DE22 4NH

Enjoy a delicious hog roast (Vegetarian option available on request) while catching up with our team and fellow clients.

The evening is FREE but booking is essential
for catering Requirements

Please call us on 01332 294929 to secure your space today!

