



NEWSLETTER

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Seasonal reminders:



- Do not let cattle graze country with significant amounts of heliotrope. Heliotrope damages the liver and cattle are affected months and even years later.
- Calves born this spring should be treated for liver fluke at about this time. We recommend drenching calves with Fasinex or Flukare C oral drench. The injectable treatments for fluke such as Ivomec Plus or Virbamec Plus are suitable for adult cattle. They should not be used on calves they do not treat immature fluke.
- Review your farms BVDV management plan and consider performing bulk milk antibody testing to assess your milking herds status.

Happy New Year



Wishing all our dairy clients a happy and successful New Year.

Thank you for your continued trust and support — we appreciate working with you and your teams, and we look forward to supporting your herds in the year ahead.

Pregnancy testing heifers

We like to pregnancy test heifers early because it is very difficult to age beyond 3½ months. The calf falls out of reach in heifers earlier than in older cows.

Compared with older cows a higher percentage of heifers are pregnant in the first 3 weeks. An early preg test will only leave a few heifers that will require a second preg test later.

The advantage of identifying empty and late calving heifers is that they can be sold for export. Late calving heifers are less profitable because they are difficult to get back in calf quickly once they enter the milking herd and often end up empty or as carry-over cows.

If heifers have been artificially inseminated an early preg test will help identify those that are pregnant to AI. This is particularly important when you have used sexed semen.

When to pregnancy test

The best way to get accurate calving dates is to have two rounds of pregnancy testing.

1. The first round is done 7 or 8 weeks after the end of AI.



Cows that are pregnant to AI are identified.

- The second round is done 7 or 8 weeks after the bulls come out, so it is possible to identify all empty cows and cows that are pregnant to the bull.

Two rounds of pregnancy testing are more accurate because it is easier to age pregnancies early on. It is easy to tell an 8-week pregnancy from a 12-week pregnancy but very difficult, if not impossible, to differentiate between a 5-month and 6-month pregnancy.

The advantages of accurate calving dates are: -

- Drying off dates can be more accurately judged. Late cows can be milked through June and July if conditions are favorable. There will be money to be made during these months.
- There is less chance of dry cow antibiotic residues in the milk.
- Cows can start getting their transition feed at the right time.

Last day of AI	Ideal time to Preg Test
Nov 17	Dec 29 – Jan 12
Nov 24	Jan 5 – 19
Nov 30	Jan 11-25
Dec 8	Jan 19 – Feb 2
Dec 15	Jan 27 – Feb 9
Dec 22	Feb 2 – 16
Dec 29	Feb 9 – 23
Jan 1	Feb 16 – Mar 2

Early Pregnancy Testing

With the ultrasound we have been pregnancy testing down to as low as day 31 after insemination. We have been doing this to identify non-pregnant cows that have not come back on heat.

These non-pregnant cows that are not seen back on heat are the “phantom cows” that often do not start cycling

again until February or March. These cows are very frustrating but when they are identified early enough there is a chance to join them again before it is too late.

Feed-based strategies to reduce fly burden in dairy cattle



Fly control in dairy systems is increasingly focused on integrated management, combining environmental hygiene, chemical controls, and nutritional strategies. One option that has gained interest is the inclusion of garlic-based feed additives in the ration.

How garlic-based feed additives work
 Garlic (*Allium sativum*) contains a range of sulfur-containing compounds (including Allicin and related metabolites) that are absorbed following ingestion and excreted through the skin and breath. These compounds are thought to alter the animal's odour profile, making cattle less attractive to flies and other ectoparasites. The effect is deterrent rather than insecticidal, meaning flies are discouraged from landing and feeding rather than being killed.

Evidence for fly and ectoparasite reduction

Research has demonstrated that garlic supplementation can:

- Reduce fly cover and defensive behaviours (e.g. tail flicking, skin twitching, stamping), indicating reduced irritation and fly pressure (Durunna & Lardner, 2021).
- Deter ticks on livestock, suggesting broader ectoparasite effects beyond flies (Massariol et al., 2009).

Reduced defensive behaviours are particularly relevant in dairy cattle, as excessive fly worry can negatively impact grazing time, feed intake, and milk production.

Use in dairy rations

Garlic-based feed additives are typically included as a daily feed-through supplement and require consistent intake over several weeks before peak effect is seen. They are best used:

- As part of an integrated fly control program
- Prior to and during periods of high fly challenge
- Alongside environmental management (manure control, drainage, laneway hygiene)

These products do not replace conventional fly control tools but may help reduce overall fly pressure and reliance on chemical treatments.

Dosage and safety considerations

Dosage rates vary between formulations and should always follow the manufacturer's label recommendations for lactating dairy cattle.

One feed company has recommended the following dosages:

- Garlic Liquid Feed Additive – Cattle: 0.9-1.5g/hd/day
- Garlic Powder Feed Additive – Cattle: 1.4-2.4g/hd/day

Garlic-based additives formulated specifically for dairy use are designed to:

- Be safe for long-term feeding
- Avoid impacts on feed intake
- Avoid tainting of milk when used at recommended inclusion rates

Producers should consult their nutritionist when introducing any new feed additive to ensure compatibility with the existing ration.

Pink eye (Infectious Bovine Keratoconjunctivitis (IBK))

This summer season is shaping up to be a challenging pinkeye season!

IBK Vaccines:

The common vaccine used in Australia is Piliguard. It is a 2ml



injection given 3-6 weeks prior to the pinkeye season and may be used in calves from 2 weeks of age. The Piliguard vaccine contains formalin inactivated cultures of three *Moraxella bovis* strains (not *Moraxella bovoculi*). A vaccine study shows that the vaccine provides protection against 64% of Australian field *Moraxella bovis* isolates, which was identified on 77% of farms investigated for pinkeye outbreaks.

Occasionally, some farms experience reduced efficacy of the commercial vaccine. When investigated further, we have found that this often traces back to an outbreak of bacteria not covered in this formulation (particularly *Moraxella bovoculi*). In these cases, we recommend an autogenous vaccine, which is made from the unique strains cultured on individual farms. One study looking into this new vaccine strategy suggested efficacy may be slightly better with these farm-specific vaccines.

Overview of IBK:



IBK is one of the most common contagious ocular diseases seen in cattle. It is of importance due to the economic impact it can have on herds (in terms of production losses and cost associated with treating affected cattle) and the impact on animal welfare.

IBK is a multifactorial disease and is associated with a range of animal factors (such as breed, age, immune status, ocular trauma) and environmental factors (such as UV light, dust, flies).

Clinical signs of IBK include the following:

- Increased tear production, closing eyelids and photophobia (light sensitivity).
- Cornea becomes cloudy and a white spot can appear in the centre.

- Corneal ulceration and the cloudiness of the whole cornea.
- Granulation (pink tissue) may develop with a purulent (white pus-like) core.
- In severe cases, cattle will develop a small white scar and other are left permanently blind.
- 2% of untreated cases may lead to eye rupture.

Treatment of the individual consists of the following:

- For mild early cases (corneal ulcers ≤ 0.5 cm) treat with topical Orbenin® eye ointment (OEE) - $\frac{1}{4}$ to $\frac{1}{2}$ a tube applied, 72 hrs apart. **Both eyes should be treated and the cream in the unaffected eye first.** Pinkeye patches over the affected eye(s) can prevent further irritation due to flies, dust and UV light and reduce the transmission between calves.



- For more severe cases (corneal ulcers > 0.5 cm), calves require an anti-inflammatory (such as meloxicam), long-acting antibiotic and topical OEE, along with pinkeye patches over the affected eye(s) or stitching the eyelids closed.
- All treated animals should be segregated to prevent further transmission in the herd.
- Treatment failure may reflect delayed/inappropriate treatment or resistance.

Prevention is based around:

- i) Vaccination:** As discussed above.
- ii) Fly control:** Fly control is generally carried out via chemical backline treatment. Other measure of fly control consists of feed additives such as Alliein, fly traps, predatory wasps, and beetles.
- iii) Minimising risk factors:** If certain risk factors can be identified, strategies can be

implemented to reduce the risk of IBK.

Herd IBK outbreaks:

In herd outbreak situations where $> 15-20\%$ of the herd affected, it is often required to blanket treat all animals with a long-acting antibiotic. This will assist in treating those affected, reduce the spread between calves and eliminate infection of carrier animals.

Photosensitisation Outbreak in Dairy Cows

We recently investigated an outbreak of photosensitisation in a dairy herd, predominantly affecting several first-lactation milking cows. Affected animals initially presented with skin lesions consistent with photosensitisation, including redness, swelling and ulceration of unpigmented areas and kicking at their udders. Despite treatment, the outbreak resulted in the death of two cows, with a further cow requiring euthanasia due to poor prognosis and welfare concerns.

Post-mortem examinations and laboratory testing were carried out on two of the affected animals. Both cows were noted to be markedly jaundiced at post-mortem, indicating significant liver involvement.

Subsequent laboratory analysis confirmed exposure to a hepatotoxic agent, with pyrrolizidine alkaloids identified as the causative toxin. Pyrrolizidine alkaloids are most associated with ingestion of certain toxic plants and can cause severe liver damage, leading to secondary photosensitisation. Careful grazing management is essential to reduce the risk of exposure and ensuring cattle are not forced to consume contaminated brought in feed. Attention should be paid to the presence of weeds known to contain pyrrolizidine alkaloids, such as heliotrope, as ingestion of even small amounts over time can result in significant liver injury.

On this farm, investigations are continuing to identify the causative

plant/ weed. It is likely these cows consumed the causative plant/ weed prior to calving into the herd.