Recommended Programs for Cattle on the North Coast

Not all diseases in livestock are preventable. However many are. With some other conditions the damage can be minimised by strategies. This brochure focuses on the theme of "Prevention is better than cure" for common diseases of cattle in the North Coast Livestock Health and Pest Authority.

Internal Parasites-
Worms
A variety of worms are found in cattle. Worms cause poor weight gains and scouring. Barbers Pole worm causes pale gums (anaemia) and Lungworm causes coughing. The principles of control are;

- Pasture management; rotational grazing, and not overgrazing and optimum stocking rates. Overgrazed, overstocked and set stocked paddocks have high worm pickup.
- Maintaining cattle in good condition through sound nutrition which develops a strong immune system and better able to cope with low worm burdens
- Drenching; age. Treat calves at weaning and then every 3- 4 months to 20 months age, with no treatments during a dry spring. Bulls should be treated once or twice a year. Adult cows in good condition do not need drenching. But "spot" drenching of individual poor cows in times of stress, e.g. prolonged drought, may be needed, when their immunity drops.
- Drenching; season. Worm larval pick up from pasture is greatest when conditions are moist; generally summer and autumn, the focus for drenching is at this time. Pick up is low in dry seasons, typically winter and spring and drenching is not normally needed at this time.
- Rotate drench between the ML group (abamectin, doromectin, eprinomectin, ivermectin, moxidectin) and the BZ group (albendazole,fenbendazole, oxfendazole) each year.

Aim to prevent worms by nutrition and management. Don't wait until they look wormy then treat.

Liver Fluke

- Have a snail as the host which is found in soaks and springs (but not in cattle troughs).
- Most common in foothills in Lismore, Tweed and parts of Casino. Also found in the Ebor and Hernani area.
- Lower levels of infestation in other areas of the Authority.
- Blood testing available ($30 approx) to see if fluke present—could lead to $ savings by knowing if fluke drench is needed. There is **NO charge** for a District Vet to collect bloods.

Stomach fluke
Can cause scouring, illthrift and occasional deaths in young cattle. Problem in the Grafton, Clarence and lower Richmond.

External Parasites are common on the North Coast. Their control can be difficult. Seek our advice

Ticks
There are three species of ticks on cattle on the north coast and the common names used vary. The three can look similar, so it is important to seek help with LHPA staff to have them identified correctly. The immature stages, called larvae and nymphs are very small and can be hard to see. Ticks can be very difficult to control.

Paralysis Tick

- Carried by native animal hosts, such as bandicoots, so is a major problem in scrubbier areas.
- Causes paralysis and kill young calves, as well as other livestock, domestic pets and humans
- Usually seen from July/August to end of January and is worst after showery weather.
- Has long mouth, the first and last pairs of legs light brown, middle two pairs cream colour.
- Control by avoid calving in scrub paddocks, and by overspray or pour on products on calves.

Cattle Tick

- **NOTIFIABLE DISEASE….. MUST be reported to an Inspector of Stock!!!**
- Look for widespread creamy- white legs and short 'nose and mouth parts'
- Seen from September/October through to May and occasionally in August in mild winters.
- Can carry Tick fever (also notifiable) organisms but outbreaks of tick fever are uncommon.
- Cattle are major host but horses, deer, sheep, goats and camelids can be hosts.
- Treatment for cattle tick needed if bringing animals from Queensland

Bush Tick

- This is a very common tick. Dark brown legs, short 'nose and mouth parts'
- Usually seen from July/August to end of January
- If in large numbers can cause anaemia from blood sucking.
- Can transmit a disease called Theileria, causing sickness in cattle with no prior exposure.
- Other hosts make control difficult.

Buffalo Fly

- Small biting flies that can cause severe skin irritation to cattle.
- Usually a problem from December to May. Winter activity in warmer areas in Tweed.
- Several different ways to do control eg ear tags, sprays, pour-ons and back rubbers.
- The application method depends on what best suits your management.
- Resistance to some chemicals is becoming a problem. Seek advice from LHPA.

Lice

- More common problem in cooler parts of the Authority area, west of the Richmond Range.
- Lice numbers higher during the cooler months of the year.
- They cause irritation and rubbing with damage to hides, fences and shade trees.
- Controlled with pour on or injectable products in winter.

Diseases Preventable by Vaccination

- **Blackleg** is a common cause of death in weaners. Inject twice with 5in1 (or 7in1) vaccine, 4 to 6 weeks apart. Give the first dose at 3 to 4 months of age. Recommended for all herds.
- **Leptospirosis** causes abortion, redwater in calves and can infect humans. Vaccinate to reduce the risk to farm staff. Available as bivalent(2in1) or as 7in1. Vaccinate breeding stock twice, 4 to 6 weeks apart. Booster ever 12 months. Recommended for all breeding herds.
- **Vibriosis** is a venereal spread disease causing reduced fertility in cows. It is common on the North Coast. Vaccinate bulls twice, 4 to 6 weeks apart before they enter the breeding herd. Booster every 12 months. Recommended for all breeding herds.
- **Botulism** has the potential to cause very heavy losses. Outbreaks are not common but when they occur the consequences are severe. Herds most at risk are those that with a history of the disease, or feed silage. Vaccinate all stock. Single dose and two dose vaccines available.
- **Ephemeral Fever** causes transient lameness fever, with subsequent short term infertility in bulls and drop in milk production in cows. Introduced cattle most at risk. Vaccination recommended for dairy herds and for bulls. Vaccinate twice, 4 to 6 weeks apart from 6 months of age. Booster every 12 months.

Vaccines for a variety of other conditions including Pink Eye, E.coli, Pestivirus, Salmonella and pneumonia are available. Veterinary advice is recommended before considering vaccinating.

Poisonous Plants

It is important to recognise the toxic plants on your property. Poisonings are typically seen in the late winter and spring months when cattle are short of feed. There are many plants that can cause poisoning from time to time, including some pasture species. This list is by no means exhaustive. These plants are commonly responsible for poisoning cattle on the North Coast.

Mother of Millions is a succulent with clusters of red flowers in July August. It is highly toxic and causes sudden death, sometimes with large numbers of cattle affected. There are also several closely related toxic succulents, whose leaf is different, but flower similar. Because it is so invasive and toxic do not tolerate any level of infestation.

Green Cestrum is a shrub with clusters of yellow flowers in winter. It causes sudden death. Cattle are usually attracted to after a shower of rain. Birds carry the seed. There are several other species of Cestrum, including Cestrum nocturnum (Night-Scented Jasmine) and all are toxic.

Red Lantana causes jaundice and photosensitisation (sunburn). The pink form is not toxic. Many other plants are known to cause photosensitisation, including some pasture plants. Introduced cattle, unaccustomed to Red Lantana are more likely to be affected. Sick cattle should be kept in the shade and may require veterinary treatment.

The strategy for both Green Cestrum and Red Lantana is to maintain control and be prepared to retreat as birds reintroduce the seed.

Fireweed is common weed. Poisonings are often associated with slashing. Causes liver failure which is seen as anything from sudden death to wasting.

Bracken Fern is common plant. Deaths are usually associated with slashing which encourages cattle, particularly weaners, to eat the fresh fronds. Causes clotting defects and death from haemorrhages. The strategy for both Bracken and Fireweed is pasture improvement to reduce the level of infestation and to avoid putting cattle on to graze fresh growth after slashing.

Black Bean. The green seeds from this tree can cause scouring and death. The tree is normally found along waterways and control should be to fence off the trees from cattle.

Nitrate poisoning on ryegrass or oats when soil nitrogen is high. E.g. N release with rain after dry or after a bean crop, or with heavy N fertilizing. Causes sudden death, typically on damp, cloudy days. When these conditions prevail it is recommended to have the pasture tested, and if levels are high then graze for a only limited time, preferably of an afternoon when cattle are full.

Protect Your Herd -don't buy in problems

Introduced cattle can create problems in two different ways. Either are naïve to problems that you already have or they bring in a problem with them.
Insect borne diseases Cattle introduced from south of the Hunter or west of the divide may have no immunity to insect borne (arbovirus) diseases that occur on the north coast, such as Akabane and Ephemeral Fever. To avoid problems buy unjoined heifers so that they have at least one summer on the north coast before joining. Vaccinate for Ephemeral Fever (3 Day). Or buy local.
Poisonous Plants Introduced cattle may be naïve to the range of plants on your property.

Problems which then spread from introduced cattle your own stock include;
Vibriosis; vaccinate bulls and introduced cows on arrival
Johne's Disease; buy from lower risk herds; Market Assurance Program or Beef Only.
Pneumonia; buy calves that have been yard weaned, rather than just straight off their mothers.
Pestivirus; particularly if introductions are in early pregnancy or about to be joined.
Ticks; treat on arrival with a Pour on ML drench and hold (and feed) in the yards for 3 to 4 days.
Drench resistant worms; treat with both an ML and BZ drench on arrival and hold (and feed) in the yards for 3 to 4 days to allow gut to empty.
Liver Fluke; if come from a property that may have fluke; treat on arrival with a product that kills immature fluke (Flukazole plus Selenium® or Nitroxynil®)and hold in yards for 3 to 4 days.
Unwanted Plants and Weeds, seeds of which may be in the gut. Again allow at least 3 to 4 days in the yards for gut to empty, rather than just releasing cattle into the paddock on arrival.

For Further Reading –
"Beef Cattle Health on the Mid and North Coast", published by the North Coast and Mid North Coast Livestock Health and Pest Authorities.

Some useful websites:
http://www.dpi.nsw.gov.au/agriculture/livestock/cattle
http://www.mla.com.au/AudienceHierarchy/Cattleproducers/default.htm
http://www.mla.com.au/cattleparasiteatlas/images/LPI382_Parasite%20Atlas.pdf
http://www.animalhealthaustralia.com.au/programs/
http://www.farmbiosecurity.com.au/

What we do?

- The district veterinarians and rangers of the North Coast LHPA are the region's frontline field service for the NSW Government's Animal Health System.
- The team's activities are defined by legislation and aim to protect and enhance human health, market access, livestock production, the environment and animal welfare.
- Our activities are essential to make sure we have markets to sell our stock to and ensure that livestock and their products are safe to use.
- We are also prepared for any emergency disease outbreaks such as Foot and Mouth Disease.
- The team often has a presence at saleyards, field days, shows and schools.
- Our rangers provide a service to control wild dogs, foxes, wild pigs and rabbits. They also issue certificates for stock movements and provide advice on livestock identification.
- Our district veterinarians are available to provide a free diagnostic service for significant livestock disease. However they do not provide treatments for animals or do activities normally done by private veterinarians.
- We also provide advice on any livestock health matters. Information on regional disease trends is released by the LHPA through press releases and through livestock health news.
- If you would like to receive livestock health news from the North Coast LHPA by email simply send an email address to matthew.ball@lhpa.org.au.

LHPA is always interested to hear what you have to say about livestock disease.