**Newsletter August 2016**

Firstly a reminder; the deadline for entries to the photograph competition is close. The winners’ picture will be the cover photo for next years’ calendar. We will start looking at entries after 31st August 2016. So get those pictures sorted out and sent in!

**Rumen bloat in cattle:**

This months’ article is on rumen bloat in cattle: This is where there is a lot of free gas in the rumen following incorrect fermentation and digestion. There are a range of things that can cause it as detailed below:

The most common bloats we see are in feeding cattle where barley is overfed, particularly where cattle are transferred to a high barley diet without sufficient time to adjust or where there aren’t buffers in the feed. The high carbohydrate levels in the barley allow it to be digested/ fermented too quickly. A main by-product of that fermentation is lactic acid, which kills the many normal bacteria you should find in the rumen. Other hardier bacteria survive and produce yet more acid. This acid environment reduces motility in the rumen, the rumen lining is often damaged and toxins and acids (lactate) are absorbed into the blood stream, leading to metabolic acidosis and severe dehydration. Treatment involves antacids, drenches, multivitamins and antibiotics etc. Its success depends on the severity of the case.

In young calves bloat can occur during the changeover from milk to hard feeds. In affected cases the oesophageal groove doesn’t close properly during feeding so milk enters the rumen instead of staying in the abomasum, where milk should be digested. As a result, fermentation of that milk causes acidosis and stops the rumen contents moving normally, leading to bloat, which can come on quickly. In young calves, particularly bottle fed calves, which are more at risk, concentrates and good quality roughage should be introduced early to help prevent this.

Any condition that interferes with normal eructation, or gas expulsion can cause bloat as well. The vagus nerve is important for normal rumen function and it runs alongside the oesophagus, through the chest, therefore if there are enlarged glands, lumps or severe chronic pneumonia lesions in the chest that put pressure on this nerve, bloat can develop. The bloat can be managed with trocars or tubing and antibiotics can be given in the case of pneumonia, but success rate in these cases is variable.

**Frothy Bloat:**

This results from feeding of lush pastures rich in clover and or fodder crops. It is also seen occasionally in barley cattle fed finely ground grain, or where a sudden change has occured. Due to a change in the nutrient balance in the feed, the rumen fluid viscosity is raised, causing small bubbles to form and leading to a stable froth that cannot be burped, or released normally. Tubes and trocars are useless in the case of a bloat like this as the foam just blocks the tubes. So an anti-foaming agent, is required as a drench: examples include vegetable oil or a silicone / piloxalene drench. Where a lot of animals are affected the cause is usually the pasture they are on. They must be moved off that immediately and fed roughage such as hay or straw. When introducing risk pastures it must be done slowly with a supply of straw or hay present.