

Horse News and Views



With the start of the hay-feeding period, we are receiving questions on a variety of feed-related subjects, including;

Dust in hay. Dust comes from one or more sources, including: rain splattering dirt onto the hay in the windrow; mold growing on the hay in the windrow following a rain or when the hay is slow drying; leaf shatter when the hay is baled very dry, e.g., less than 12% moisture and the leaves shatter; and, the most common, mold growth and mold spore production when hay is baled too moist and heating occurs in the mow, providing the ideal conditions for molds to grow.

The **presence of contaminants** in the hay, including moss, pigweed, milkweed and ferns. Often, since the horses are not eating them, we find these contaminants in the feeders. In the case of moss, the tines of the rake were set too low, enabling them to scratch and incorporate soil and moss into the windrow of hay. The greater danger is the incorporation of *Clostridia botulinum* spores along with the soil. This could lead to botulism, especially if the hay is being wrapped or bagged. Pigweed, as a member of the Amaranthus family, can cause nitrate poisoning in ruminants, myocardial degeneration and renal toxicity in other species. Milkweeds contain cardiac glycosides but are unpalatable. Ferns, especially bracken fern, can cause vitamin B₁₂ deficiency. They are seen when hay is being harvested along the side of a fence row or bush lot.

The **danger of red maple leaves** in paddocks or the disposal of leaves into manure piles adjacent to paddocks. Wilted red maple leaves are toxic to horses. The amount of toxin increases in leaves during the summer. Fallen leaves remain toxic for a few weeks or more. Ingestion of fresh leaves does not appear to cause disease. The ingestion of 1.5 - 3 grams of wilted leaves per kilogram of body weight (0.7 - 1.5 kg for the average 450-kg horse) will cause the haemolytic disease.

For further information, contact Dr. Bob Wright (519) 846-3412 or visit our web site: <http://www.omafra.gov.on.ca/english/livestock>

 **Ontario**
Ministry of Agriculture,
Food and Rural Affairs

Ontario Association
of
Equine Practitioners

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of GUELPH

Horse News and Views is prepared by
Dr. Bob Wright, Animal Health and Welfare,
Ontario Ministry of Agriculture, Food and Rural Affairs,
Wellington Place, R.R. #1, Fergus, Ontario N1M 2W3
Telephone: 519-846-3412 Fax: 519-846-8101
E-mail: robert.wright@omaf.gov.on.ca

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