

Baling Wet Hay



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When baling hay, moisture content can influence yield, quality and storability. If the hay is too wet, it can get moldy or overheat and catch fire. Of course, if it's too dry, leaves will fall off. Both situations can reduce yield and quality.

If a preservative like propionic acid is applied as it's baled, hay can be a bit wetter. To get good results from preservatives, it helps to understand how they work. Baled hay naturally contains millions of bacteria and mold fungi. As they consume nutrients from hay, these microbes produce heat. Usually, hay gets dry enough that the microbes die or go dormant, but when there's too much moisture, it will mold and heat. This heat forces moisture out of the bale, sometimes called "going through a sweat." The duration and intensity of this heat will determine the amount of damage caused to the hay. Many of the microbes are killed by adding preservatives, meaning less heat is produced, giving hay time to dry naturally, without the "sweat."

Preservatives can help make good hay at higher moisture levels, but correct management is needed to keep that hay in good condition. As the hay dries, the preservatives vaporize and disappear. Stacking bales tightly into storage soon after baling or in other ways failing to permit natural drying, may eventually allow microbes to again become active. Also remember that since the protection from preservatives only lasts a short time, microbial activity can re-develop at a latter date if rain, high humidity, or other sources re-wet the hay.

As an interesting side note, heat damage causes hay and especially the protein in hay to be less digestible. However, heat-damaged hay often turns a brownish color and has a sweet caramel odor. Cattle readily eat this hay, but due to the heat damage, its nutritional value may be lower.

