

Winter Feeding – How to Calculate Number of Bales and Acreage Needed

By Cheryl Cesario, Livestock and Grazing Specialist, American Farmland Trust

Adapted from: The Basics and Benefits of Bale Grazing, Manitoba Forage Council

This is a basic example using one type of feed – dry round bales. If a farmer is feeding multiple feed types – ex. dry hay, haylage, baleage, corn silage, etc, there would be additional steps between determining the total dry matter requirement and the ‘as fed’ requirement, as each of the above feeds has different dry matter levels.

Calculations:

Number of livestock X Livestock’s weight X Dry matter intake (DMI) per day % BW
X Feeding period (number of days) = Feed needed (dry matter)

Amount of feed needed (DM)
_____ = Feed needed (as-fed)
Feed dry matter %

Feed needed (as-fed)
_____ = Bales needed
Bale weight



A producer may add 10-20% to this total to ensure enough feed is on hand and to account for spoilage or waste.

Acreage required to produce the above:

Total as-fed # / 2000# = Tons of feed

Tons of feed/ Yield (T/ac) = Estimate of acres needed