

## FLAT COW MATTRESS MAT COST COMPARISON CALCULATOR

## DON'T CONFUSE SAVINGS UP FRONT FOR REAL VALUE IN COW COMFORT

One of the "selling points" of some of the most common flat cow mattresses on the market today is affordability. Even if a cow mattress costs as much as \$100 less than a DCC Waterbed up front, the "savings" quickly evaporate.

		Cost Comparison Calculation		Cost /savings	
Up-front comparison	1	DCC Waterbeds up-front cost may be as much as \$100 more than flat cow mats. Line 1 is the estimated up front cost "savings" when installing flat cow mats over DCC Waterbeds.	1	\$100	Up-front "savings"
Higher Bedding Costs	2	The average cost per cubic yard of sawdust, the most common top bedding, is \$17.50 per yard in the Midwest and New England based on 2015 survey data.  • DCC Waterbeds use 1 gal. of top bedding per day. This is approximately 2.1 yds. bedding per stall per year at \$17.50 per yard = \$36.75  • Flat cow mattresses use approximately 1.3 gal. of top bedding per day. Because mats pack over time, they require increasing amounts of top bedding over time, adding up to additional cost year-on-year as comfort diminishes and extra absorption is needed is approximately 2.8 yds. of bedding per stall per year at \$17.50 per yard = \$49.00	2	(\$12.25)	Additional cost of flat cow mat bedding per stall per year
More Frequent Hock Treatment on Flat Cow Mats	3	Veterinary treatment plus lost milk plus extra work of a hock sore case is approximately \$50 per cow. Estimating that hock sore treatment is 11.6% more frequent on flat cow mat herds, it will cost approximately 11.6% more per year to treat hock sores. 11.6% x \$50 per case = \$5.80 more per stall per year. Line 3 shows flat cow mat hock treatment costs \$5.80 more per stall per year.  • DCC Waterbeds herds show 94.6% of cows with hock scores of 0 or 1 [0 = no hock sore, 1 = ½" area of hair loss or less] on par with sand bedding  • Flat cow mattresses show only 83% hock scores of 0 or 1.  • The RATE of hock sores on flat cow mat herds is 11.6% higher than DCC Waterbeds herds.	3	(\$5.80)	Additional cost of treating hock sores on flat cow mats per stall per year
Higher Cull Rate on Flat Cow Mats	4	Cost of a replacement heifer is approximately \$1,700. Income from a cull cow is approximately \$975 (1,500 lbs x \$0.65 per pound). Net cost of a replacement heifer is approximately \$725. Herds on flat cow mats show a 6.5% higher cull rate than herds on DCC Waterbeds; therefore it will cost approximately 6.5% x \$725 more for replacement heifers, or \$47.12 per stall pear year. Line 4 shows flat cow mat replacement heifers cost \$47.12 more per stall per year.  • DCC Waterbeds herds show 19.8% of cows in 4+ lactations.  • Flat cow mattresses show only 13.3% of cows in 4+ lactations. (http://bit.ly/JDS2007).	4	(\$47.12)	Additional cost of heifers per stall per year
Increased Milk Production from More 4+ Lactation Cows on DCC Waterbeds	5	Mature (4+ lactation) cows produce approximately 40cwt higher than an average replacement heifer. Herds on DCC Waterbeds show a 6.5% higher 4+ lactation cow average than herds on flat cow mats; therefore, herds on flat cow mats will produce 6.5% x 40 cwt = 2.6cwt less milk per stall per year. At an average \$15 per cwt, this results in loss of income of \$39 per stall per year on flat cow mat herds.	5	(\$39.00)	Cost of milk loss from 4+ lactation cows per stall per year
Cost Savings	6	Adding lines 1 through 5. This is the TRUE additional cost to of flat cow mats PER STALL PER YEAR versus DCC Waterbeds IN THE FIRST YEAR	6	(\$4.17)	Amount lost per stall in year 1 when installing mats over DCC Waterbeds
	7	Adding lines 2 through 5. This is the TRUE additional cost of flat cow mats PER STALL PER YEAR in year 2+	7	(\$104.17)	Amount lost per stall in years 2+ when installing mats over DCC Waterbeds
	8	Multiplying line 7 by 9 years, and then add line 6 (Year 1). This is the TRUE additional cost of flat cow mats PER STALL PER YEAR over 10 years.	8	(\$941.70)	Amount lost per stall over 10 years when installing mats over DCC Waterbeds