

MISSOURI : SPRING BORN FEEDER CALF TRACE MINERAL STATUS



REGION	# CALVES AT RISK	MINERAL*	% CALVES DEFICIENT
1 Northwest	223,000	Copper	15.3%
		Selenium	4.7%
		Zinc	34.7%
2 North Central	222,000	Copper	18.5%
		Selenium	8.3%
		Zinc	45.8%
3 Northeast	121,000	Copper	26.7%
		Selenium	11.8%
		Zinc	30.4%
4 West Central	240,000	Copper	20.1%
		Selenium	16.6%
		Zinc	33.3%
5 Central	460,000	Copper	26.7%
		Selenium	18.8%
		Zinc	23.8%

6 East Central	136,000	Copper	43.1%
		Selenium	25.5%
		Zinc	25.5%
7 Southwest	312,000	Copper	0%
		Selenium	14%
		Zinc	24%
8 South Central	320,000	Copper	0%
		Selenium	24.1%
		Zinc	13.8%
9 Southeast	39,000	Copper	53.1%
		Selenium	40.0%
		Zinc	33.3%
Summary estimates	2,073,000	Copper	17.1%
		Selenium	16.5%
		Zinc	26.5%

***Reference ranges:**

Copper deficiency ($\leq 0.45 \mu\text{g/g}$)- serum copper

Low blood selenium concentrations ($< 70 \text{ ppb wet weight}$)

Cattle with serum concentrations of zinc $\geq 0.8 \text{ ppm wet weight}$ are zinc replete, cattle with serum zinc concentrations $\geq 0.4 \text{ ppm}$ and $< 0.8 \text{ ppm}$ have marginal zinc status, and cattle with serum zinc concentrations $< 0.4 \text{ ppm}$ are deficient.

REFERENCES:

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