

What the Heck is an AUM?

by Tara Mulhern Davidson

Forage production can be measured in several ways. Producers may count forage by the bale, or perhaps measure it as pounds per acre or even kilograms per hectare. When it comes to grazing however, the amount of grass available on rangeland is typically measured in Animal Unit Months (AUM). AUMs are used for grazing lease agreements, establishing fees, calculating stocking rates, and balancing pasture forage supply and demand but what exactly is an AUM?

An Animal Unit Month (AUM) is defined as the amount of forage a 1000 pound cow (with or without a calf) will eat in a one month time frame. It is a method of measuring forage, similar to bales or pounds. There is no firm number attached to one AUM, however many guides and publications suggest a cow will eat 1.5-3.5% of her body weight each day.

The adage 'take half and leave half' applies as AUMs do not account for the entire amount of forage available in a pasture. They are measured with consideration for leaving adequate carryover for regrowth and habitat maintenance.

How much forage is available?

The number of available AUMs a pasture can produce depends on many factors. With respect to native prairie, available AUMs will depend on the condition (species of plants) and rangeland health, the soil zone and range type. The chart

below compares two pastures with similar range types from different soil zones.

(adapted from Range Plan Development, Saskatchewan Pasture and Grazing Technologies Project, 1990)

Using the numbers from the chart, you will see a section of excellent native prairie on a sandy range site in the Dry Brown Soil Zone will provide about 128 AUMs of forage (640 acres multiplied by 0.20 AUM/acre). A section of excellent native prairie on a sandy range site in the Black Soil Zone will provide about 352 AUMs of forage (640 acres multiplied by 0.55 AUM/acre).

How much forage do I need?

Calculating stocking rates can be straight forward as long as your cows weigh 1000 pounds, but what happens if they weigh more? An Animal Unit Equivalent (AUE) can be used when calculating stocking rates to better reflect the reality of your operation. For example, if your average grazing cows weigh 1300 pounds, you can use 1.3 as an animal unit equivalent. If you are grazing yearlings, you may use 0.6 or 0.7 as an animal unit equivalent when calculating stocking rates.

Using the numbers from the previous section, if your pasture in the Dry Brown Soil Zone provides 128 AUMs of forage, how many 1300 lb pairs would that support for a 5 month grazing season?

What about the pasture in the Black Soil Zone with 352 AUMs?

Available AUMs will not fluctuate a lot from one year to the next. However, they may gradually shift. For example, if a previously overgrazed prairie pasture in poor range condition receives proper rest and recovers over a period of years, the plant community may shift, the range condition may improve, and available AUMs may increase to reflect the recovered prairie. Conversely, if pastures are grazed above their carrying capacity for a long period of time, the condition and health of the range may deteriorate as well the pasture's ability to provide forage.


Achieving proper stocking rates on native range is both an art and a science. Carefully monitoring your range resources and understanding how much forage your livestock are consuming are key for ensuring your pastures will sustain the livestock, the environment and your beef business long into the future. 

TABLE 1. ESTIMATED STOCKING RATES FOR ZONES ACROSS SASKATCHEWAN (IN AUM/ACRES)

RANGE SITE: RANGE CONDITION	DRY BROWN SOIL ZONE	DARK BROWN SOIL ZONE	BLACK SOIL ZONE						
	Clayey	Loamy	Sandy	Clayey	Loamy	Sandy	Clayey	Loamy	Sandy
EXCELLENT	0.25	0.25	0.20	0.45	0.45	0.40	0.55	0.55	0.45
GOOD	0.20	0.20	0.16	0.36	0.3	0.32	0.44	0.44	0.36
FAIR	0.16	0.16	0.13	0.29	0.29	0.26	0.35	0.35	0.28
POOR	0.13	0.13	0.10	0.23	0.23	0.21	0.28	0.28	0.23


SSGA-OLS: A Winning Partnership

The Saskatchewan Stock Growers Association has partnered with OLS, Orwig Livestock Supplements, to form a winning collaboration that will ultimately benefit farmers. "Orwig's Tubs Inc. is pleased to continue supporting the SSGA as they advocate for the beef industry in Saskatchewan," stated Jay Fitzpatrick of OLS.

When members purchase a tub from OLS, the company will donate \$1 to the SSGA for each tub purchased. Members are asked to send receipts from purchases to the SSGA office for verification. "By purchasing OLS tubs members are able to make a meaningful contribution to the SSGA," stated Shane Jahnke, SSGA President. "This is a valuable partnership for the SSGA because these funds are used to support programs and activities that benefit producers." The program has been ongoing since January 1, 2017.

OLS Tubs offers a well-balanced vitamin and mineral program that complements

livestock's seasonal needs. "Orwig's" Tubs Inc. is common sense nutrition. It is the lowest cost per head per day," Fitzpatrick added. Convenient and easy to handle

with an unlimited shelf life, OLS Tubs provides many benefits leading to overall healthier livestock with higher conception rates. 



OLS will donate \$1 to SSGA for every tub purchased by an SSGA member since January 1, 2017. Send in a copy of your receipts to the SSGA office for verification.

Please mail your receipts to:
SK Stock Growers Association
Box 4752, Regina, SK S4P 3Y4

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2018 Grazing Rental Rate	October	November	Weighting	
Slaughter D1,2 cows	\$81.63	\$80.26	12.00%	\$ 9.71
Feeder steers 800-900 lbs.	\$198.50	\$198.29	17.00%	\$ 33.73
Feeder steers 500-600 lbs.	\$228.35	\$229.71	35.00%	\$ 80.16
Feeder heifers > 800 lbs.	\$177.71	\$181.43	21.00%	\$ 37.71
Feeder heifers 500-600 lbs.	\$200.37	\$199.05	15.00%	\$ 29.96
				\$ 191.27

Rent	Beef Produced (lbs)	46
	Weighted price (\$/lb)	1.9127
	Constant Stocking Factor	0.8
	Share (%)	0.1275
	Per AUM	\$ 8.97

