

Forage Potential in Saskatchewan

Glenn Barclay PAg

Forage Development Specialist

Saskatchewan Ministry of Agriculture

I will deal with two main themes in this presentation. The first theme is the “macro” issues or what is happening with land use and livestock numbers in the province. The second theme will deal with what producers can do on their property to derive opportunities from raising forages.

1) Land and Cattle Issues:

In discussing Forage potential in Saskatchewan we must first review the potential of the land base in Saskatchewan.

Natural Resources Canada states we have 160,886,180 total acres. 146,215,450 acres are land and 14,670,730 acres are water. About 52% of the province’s land base is forest. This works out to approximately 76,005,670 acres (1). Of the 76,005,670 acres, 37% is assumed to be commercial forest and 63% is considered to be non-commercial (1).

If we take 146,215,460 acres – 76,005,670 acres in forest = we have 70,209,790 acres left. Taking off Indian Reserves, Sask. Environment land, urban land in cities, towns and villages, parks both provincial and federal, southern water bodies and other uses we come up with figures ranging from **64.0 Million Acres to 67.0 Million acres for agricultural purposes.**

Two Excellent Sources of Data are SAMA figures and Census figures.

2007 SAMA figures indicate there are 66,918,419 title acres in the rural municipalities in the province. About 68% of these titled acres are cropped or summer fallowed (45,661,198 acres). About 24% or 15,992,021 acres are deemed to be pasture or hay land. There are 5,251,268 acres of waste land (sloughs, creeks, etc.) and 13,932 acres of non-ag land (commercial land, oil batteries etc.).

2006 Census figures give us this information:

	Acres - Sask. - 2006	
Area of Farm Land	64,253,845	
In Crop	36,967,225	57.5 %
Summerfallow	6,001,296	9.3 %
Tame or Seeded Pasture	4,848,757	7.6 %
Natural Land for Pasture	12,789,656	19.9 %
All Other Land	3,646,911	5.7 %

You'll notice SAMA and Census Figures don't equal each other ... but they are close. SAMA field inspections are not done ever year. Census figures are a "snapshot" based on how a farmer answers the census inquiries.

There are four major soil zones in the province:

The Brown soil zone covers approximately 24.6% of the land mass. 69% of this area is cultivated. The Dark Brown soil zone covers approximately 28.4% of the land mass. About 82% of it is cultivated. The Black Soil Zone occupies 29.3% of the provincial land mass. 83% is cultivated. The Gray, Dark Gray and Dark Gray wooded soils cover about 17.7% of the provincial land mass. About 45% of this area is cultivated (2).

Crop Insurance provides a good summary of land quality. To illustrate "A" class soil would be Melfort Silty Clay Loam, and "M" would be Meota Loamy Sand to Sand.

Soil Class	Crop Insurance Productivity Rating	Number of Quarters	Percent of Total
A	85 and over	391	0.1
B	80 – 84.9	11,132	2.9
C	75 – 79.9	9,224	2.4
D	70 – 74.9	10,822	2.8
E	65 – 69.9	15,658	4.1
F	60 – 64.9	35,466	9.3
G	55 – 59.9	60,877	15.9
H	50 – 54.9	66,238	17.3
J	45 – 49.9	68,127	17.8
K	40 – 44.9	47,411	12.4
L	35 – 39.9	25,833	6.8
M	30 – 34.9	15,097	4.0
O	25 – 29.9	9,045	2.4
P	24.9 and under	6,766	1.8
TOTAL		382,087	100.0

It should be noted 51% of the land base falls into the “G” “H” and “J” land classes. 45.2% of the provincial total is classified as “J” class land or poorer. Are these soils economically sustainable for long term annual crop production?

The following table from Stats Canada indicates our provincial beef cow herd is growing. Note: 2000 figures vs. 2007 figures. The percentage increase is noted with brackets. (The numbers given are Millions of Cows counted on January 1st of the calendar year).

	2001	2002	2003	2004	2005	2006	2007
Sask.	1.16	1.22	1.32	1.43	1.54	1.56	1.48 (+ 27.5%)
Alta.	2.00	1.96	1.92	1.96	2.09	2.05	2.00 (0%)
Man.	0.52	0.53	0.55	0.64	0.65	0.67	0.62 (+ 19%)

Given Alberta’s 2006 Land use Census Numbers it would appear the ability to expand forage acres is limited in that province. Only 4.3% of Alberta’s land base is summerfallow (3). With the recent upswing in crop prices, the acreage in crop (45.6%) is unlikely to fall during the next few crop years.

Important land issues for *our* province include the conversion of cropland and marginal land to forages, management of pasture, hay, and range land and water supplies for grazing animals. Other important issues are research, production economics for crops & livestock, multiple land use pressures – recreational – ATVs - hunting & agro-tourism, “urban” encroachment, livestock enterprises, etc. and of course Climate Change!! It took 10,000 years of post - glaciation grass growth to create the majority of our productive Chernozemic (soils formed under grassland) soils. Soils developed under forest growth are not usually amenable to forage growth. The ability to expand forage acres to land currently under forest cover will be quite limited.

2) Opportunities Raising Forages:

Long term decisions about land use should not be based on short term trends! The hot crop prices this winter or our high dollar value compared to the US dollar can change quickly. If you decide to grow and market hay, look carefully at your skill set. You may be an excellent producer and machine operator but your weak link might be marketing. If you trained someone else to operate your equipment, with your operating expertise, you can get more time to spend on marketing your forages.

Keeping better records of how you grew your forage – what you did right or wrong, weighing bales and feed testing will pay dividends in the long run. How are you going to differentiate your product from other forage on the market? How are you going to keep and maintain your customers? Are niche forage markets for sheep, dairy cattle, horses, bison or other species available? What are these potential customers looking for? How do *they* view forage quality? Selling takes lots of listening to your customers needs.

Finding new customers can take more computer usage. Monitoring drought, e-mailing potential customers you met at cattle and horse shows, advertising on the Saskatchewan Agriculture website or developing a website for your farm or ranch may be in your future.

Keeping your existing customer base takes work too. Were they satisfied with your product? Did you supply a feed test for them and deliver the product when they wanted? Did you remember them when a drought was on and did not abandon them for a “quick buck” elsewhere?

The days of verbal agreements are over. I would suggest you use a contract when you are selling your hay. As the value of your product increases your caution should increase. Some of the items to be reviewed include method of payment and payment schedule, insurance, which party pays for the trucking, signatures and date.

The last item I would like to review would be the potential to raise forage seed. It takes a strong entrepreneurial spirit as big swings in prices and yield can await you! New diseases and insects will also require diligence. The Saskatchewan Forage Seed Development Commission website states there are approximately 600 forage seed producers in Saskatchewan growing their product on 80,000 to 140,000 acres. There can be 7 – 10 active buyers of forage seed every year in the province. There are over 30 native and non-native forage seed species grown in Saskatchewan. Opportunities exist!

Range and Forage Specialists in Saskatchewan Agriculture Regional Offices:

Glenn Barclay - North B.	446 – 7650
Trevor Lennox - Swift C.	778 - 8294
Lorne Klein – Weyburn	848 - 2382
Todd Jorgenson – Yorkton	786 - 5859
Dale Weisbrot – Regina	787 - 9476
Charlotte Ward – Outlook	867 - 5559
Al Foster – Tisdale	878 – 8890

Sources:

- (1) Saskatchewan Environment - 1st Report on Saskatchewan’s Provincial
- (2) Agric and Agri-Food Canada Sept 2000 Bi-Weekly Bulletin
- (3) 2006 Census information