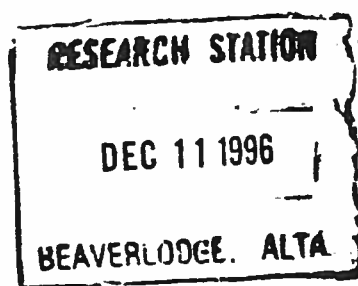


Alberta Regional Forage Variety Testing Program



**1996 Annual Report
Alberta Forage Variety Committee
Alberta Forage Council**

Warning: This Data is Not for Publication

Since some varieties have been tested for shorter periods of time than others, it would be irresponsible to use either average yield figures and/or percent of check to make variety comparisons. Only after a **minimum** of three years of testing should data be interpreted as 90% accurate. Station data may be discarded for any particular year due to extreme variations that cannot be accounted for in the statistical design.

The Alberta Forage Variety Committee of the Alberta Forage Council would like to thank Alberta Agriculture, Food and Rural Development for their support of the Regional Forage Variety Testing Program.

Table of Contents

			Page No.
Alberta Regional Forage Variety Testing Program			1
Project Personnel			2
Sites for Regional Forage Variety Testing			2
Map of Major Soil Climatic Areas			3
Species and Origin of Cultivars used in Regional Testing			4
Alberta Forage Variety Committee Guidelines for Variety Testing			8
Site Results:			
Alfalfa	Area 1	Bow Island	15
		Brooks	16
		Oyen	18
	Area 2	Provost	20
		Standard	21
	Area 3	Olds	22
		Vegreville	23
	Area 4	Fort Kent	24
		Westlock	25
	Area 5	Beaverlodge	26
		Falher	27
	Irrigation	Bow Island	28
Brooks		29	
Meadow Bromegrass	Area 1	Brooks	30
	Area 5	Beaverlodge	30
		High Prairie	31
Smooth Bromegrass	Area 5	Beaverlodge	32
		High Prairie	33

Orchard Grass	Area 3	Olds	34
		Ellerslie	34
Timothy	Area 3	Olds	35
	Area 5	Beaverlodge	36
		High Prairie	37
	Irrigation	Bow Island	38
		Brooks	39
Crested Wheatgrass	Area 1	Brooks	40
		Oyen	40
Pubescent & Intermediate Wheatgrass	Area 1	Brooks	41
Wildrye	Area 1	Brooks	42
		Oyen	42
Summary Tables:			
Alfalfa			43
Meadow Bromegrass			50
Smooth Bromegrass			51
Timothy			52
Crested Wheatgrass			53
Pubescent & Intermediate Wheatgrass			53
Wildrye			54
Appendix 1	Climate Data		55

1996 Annual Report

Alberta Regional Forage Variety Testing Program

The increasing role of forages in Alberta's agriculture has resulted in an increasing demand for information on variety performance and species adaptation. The Forage Variety Testing Program continues with the development of a yield and agronomic database for the province.

This is the sixth report for the regional forage testing program started in 1989 to provide information to Alberta producers. Test plots for the program are established according to the Alberta Forage Variety Committee *Guidelines for varietal testing to support Canadian registration and recommended use in Alberta*.

When adequate stations year and yield data criteria have been met the information will be used by the Alberta Forage Variety Committee to annually update the Alberta Agriculture factsheet *Varieties of perennial hay and pasture crops for Alberta*, Agdex 120/32, and the Website <http://www.agri.gov.ab.ca/>

Statistical information for this report was obtained through an Analysis of Variance (ANOVA) using SAS, version 6.10. Least significant difference (LSD) values are presented at the bottom of each table when statistically significant differences are present using the 5% level of significance. This means there is a 95% probability that you can reject the hypothesis that the treatments are the same or there is only a 5% probability that the treatment differences occurred by chance. If the difference in treatment values is less than the LSD value, the treatments are not considered to be significantly different.

Project Personnel

Forage Testing

Program Supervisor

Arvid Aasen

Field Crops Development Center

Lacombe

Phone: (403) 782-8027

FAX: (403) 782-5514

Program Coordinator

Henry Najda

**Crop Diversification Centre - South
Brooks**

Phone: (403) 362-1346

FAX: (403) 362-1306

Data Processing

Art Kruger

Crop Diversification Centre - South

Brooks

Phone: (403) 362-1349

FAX (403) 362-1306

Supervisor, Provincial Variety

Testing Programs

Jerome Lickacz

Agronomy Centre

Edmonton

Phone: (403) 427-7098

FAX: (403) 422-9745

Project Leaders

Arvid Aasen - Field Crop Development Center, Lacombe

Jeannie Yoder - Smoky Applied Research and Demonstration Association, Falher

Guy Bonneau - Lakeland Applied Research Association, Bonnyville

Nigel Fairey - Agriculture and Agri-Food Canada, Beaverlodge

Jackie Fortier - Gateway Research Organization, Westlock

Sandra Geddes - Chinook Applied Research Association, Oyen

Henry Najda - Crop Diversification Centre - South, Brooks

Michele Pahl - Alberta Environmental Center, Vegreville

Sites for Regional Forage Variety Testing

**Area 1 - Bow Island
 Brooks
 Oyen**

**Area 2 - Provost
 Standard**

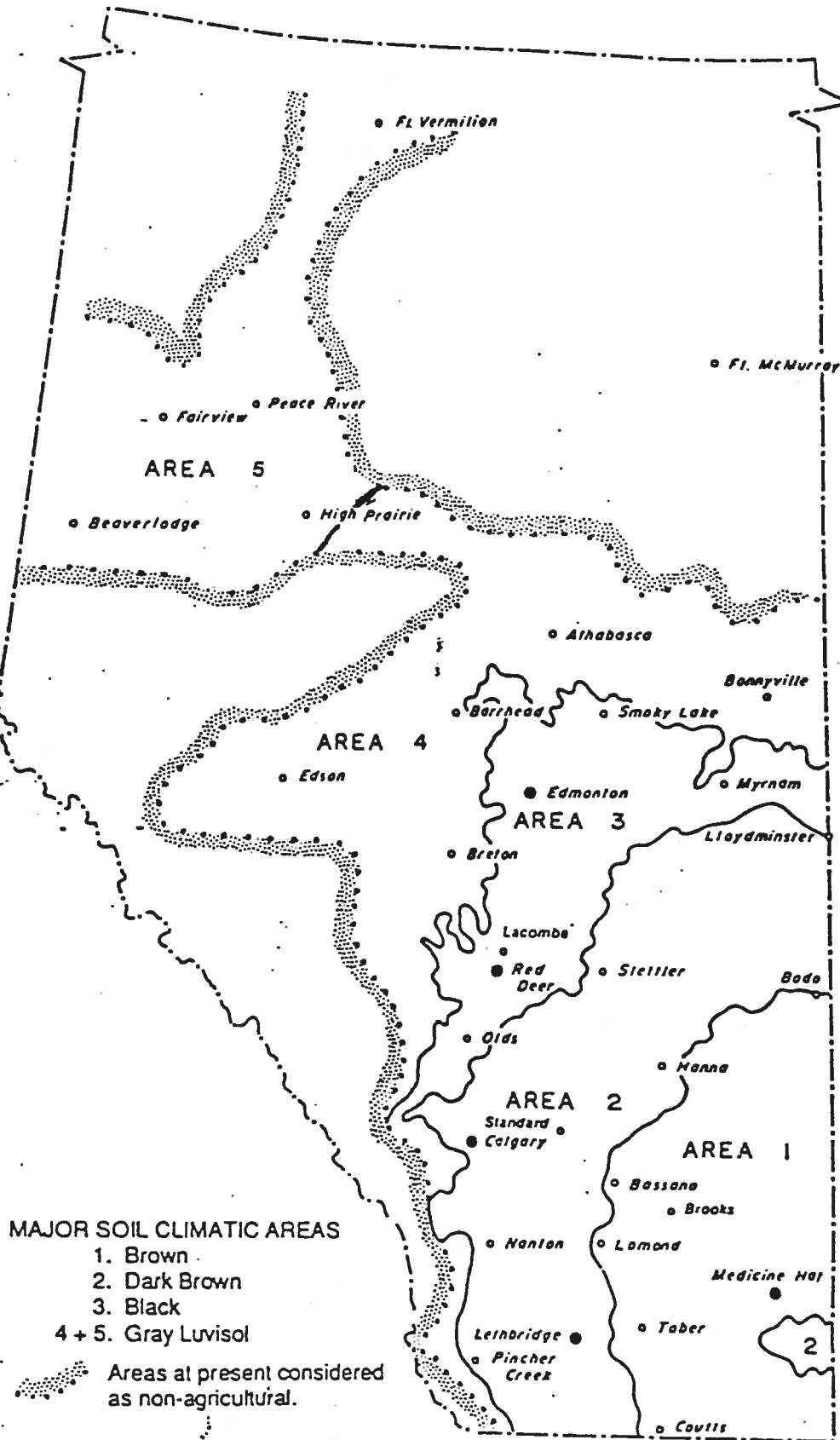
**Area 3 - Olds
 Ellerslie
 Vegreville**

**Area 4 - Fort Kent
 Westlock**

**Area 5 - Beaverlodge
 Falher
 High Prairie**

**Irrigation - Bow Island
 Brooks**

Major Soil Climatic Areas



Species and Origin of Cultivars used in Regional Testing

Alfalfa

20/20	Bonis
526	Pioneer Hi-Bred
630	Seed Link
5151	Pioneer Hi-Bred
5246	Pioneer Hi-Bred
5262	Pioneer Hi-Bred
5311	Pioneer Hi-Bred
5312	Pioneer Hi-Bred
5364	Pioneer Hi-Bred
5454	Pioneer Hi-Bred
Absolute	Proven Seed
AC Caribou	Brett-Young Seeds
AC Blue J	Secan
AC Nordica	Prairie Seeds
Algonquin	Public
Alouette	Pickseed
Anchor	Oseco
Anik	Topnotch Nutri
Beaver	Public
Centurion	Newfield Seeds
Crusader	King Agro
Dart	Oseco
DK 122	Dekalb Canada
Edge	First Line
Encore	Proven Seed
Garst 636	Dawson Seed
Heinrichs	Proven Seed
Impact	Proven Seed
Legend 2	Proven Seed
Magnum III	Seed Link
Multi King 1	Proven Seed
Oac Minto	Brett-Young Seeds
Peace	Prairie Seeds
Pickseed 8920MF	Pickseed
Profit	Brett-Young Seeds
Prowler 1	Proven Seed
Rambler	Secan
Rangelander	Secan
Spredor 2	Proven Seed
Spredor 3	Proven Seed
Stampeder	Pickseed
Starmaster	Oseco
Sure	Proven Seed
Viking 1	Proven Seed

Meadow Bromegrass

Fleet
Paddock
Regar

Secan
Newfield Seeds
Public

Smooth Bromegrass

Baylor
Bravo
Carlton
Magna
Manchar
Radisson
Rebound
Signal

Oseco
Pickseed
Public
Prairie Seeds
Oseco
Proven Seed
Alberta Wheat Pool
Public

Orchard Grass

AC Nordic
AC Splendor
Arctic
Chinook
DS7
Frode
Jay
Juno
Kay
Mobite
Napier
Okay
Potomac

Brett-Young Seeds
Proven Seed
Dawson Seed
Public
Dawson Seed
Pickseed
Parsons Seeds
Pickseed
Richardson Seeds
Dawson Seed
Oseco
Pickseed
Topnotch Nutri

Timothy

Alexander	Bonis
Alma	Oseco
Argus	Oseco
Basho	Secan
Bottnia II	Proven Seed
Bounty	Labonté Seeds
Carola	Oseco
Champ	Public
Climax	Public
Colt	Proven Seed
Engmo	Pickseed
Glenmor	Proven Seed
Hokuo	Landis
Hokusyu	Alberta Agriculture
Itasca	United Co-operatives of Ontario
Joliette	Bonis
Nosappu	Alberta Agriculture
Promesse	Brett-Young
Richmond	Pickseed
Saguenay	Bonis
Tiiti	Henri Malon
Tiller	Oseco
Timfor	Proven Seed
Winmor	Proven Seed

Crested Wheatgrass

Fairway	Public
Kirk	Secan
Nordan	Secan
Parkway	Secan

Pubescent and Intermediate Wheatgrass

Chief	Newfield Seeds
Clarke	Secan
Greenleaf	Ken Long Seeds

Altai Wildrye

Eejay
Prairieland

Prairie Seed
Secan

Dahurian Wildrye

Arthur
James

Newfield Seeds
Secan

Russian Wildrye

Cabree
Mayak
Swift
Tetracan

Ken Long Seeds
Public
Secan
Secan

Alberta Forage Variety Committee (AFVC)

Guidelines for Variety Testing

I. INTRODUCTION

Registration:

Applications for registration are considered by the Plant Health and Plant Products Directorate, Food Production and Inspection Branch, Agriculture and Agri-Food Canada and if the variety meets their criteria, it is registered in Canada. Such registration requires support from a provincial forage advisory committee. The Alberta Forage Variety Committee (AFVC) will provide the support if the documentation meets the requirements as set out in these guidelines. Support for registration by the AFVC does not necessarily mean that the variety will be placed on the Forage Crop Variety List for Alberta.

Adaptation:

To place a variety on the Forage Crop Variety List for Alberta, regional tests must be conducted within the province and the variety must meet the criteria of the AFVC. The variety must be registered or accepted as eligible for registration by the Plant Health and Plant Products Directorate, Food Production and Inspection Branch, Agriculture and Agri-Food Canada.

The AFVC will accept private and public data to support registration and/or adaptation if testing has been done in a satisfactory manner. **The varietal performance information submitted for support for registration and/or adaptation must be presented to the coordinator of the AFVC before November 14 of the current year.** Applications received after this date will be retained for consideration the following year.

II. MEMBERSHIP

Voting Members

1. Alberta Forage Council
2. Canadian Seed Growers' Association (Alberta Branch)
3. Canadian Seed Trade Association (Alberta member)
4. University of Alberta, Department of Agricultural, Food and Nutritional Science
5. Agriculture and Agri-Food Canada, Research Branch
6. Alberta Agriculture, Food and Rural Development, Forage Unit
7. Forage Plant Pathologist, Alberta Environmental Centre

Ex-Officio Members

1. Co-ordinator, Alberta Agriculture, Food and Rural Development - Forage Unit
2. Secretary, Alberta Agriculture, Food and Rural Development - Forage Unit
3. Regional Program Officer, Plant Health and Plant Products Directorate, Food Production and Inspection Branch, Agriculture and Agri-Food Canada
4. Alberta Forage Council (Manager)

Committee membership is structured according to criteria established by the Alberta Forage Council.

III. MEETINGS

The annual AFVC meeting is usually held in the last week of November, with more meetings held as required. Variety sponsors are not present during discussion or voting. Four voting members of the AFVC will constitute a quorum. Alternate members may vote if the regular members cannot attend a meeting.

IV. TRIALS

A. Standard Guidelines for Forage Crop Variety Testing

1. All variety trial data submitted must be based only on tests which are replicated and randomized according to standard statistical procedures.
2. The AFVC must be advised by the organization or institution of their intent to test and the site location(s) of the tests. All variety tests are subject to inspection by the AFVC or an appointed representative or representatives of the committee.
3. Check or standard varieties recommended for Alberta must be used in the test for comparison purposes.
4. Accepted agronomic practices consistent for the crop species concerned are required during the entire test period.
5. Requirements specifically for registration purposes:

For perennial species, a minimum of nine (9) station years of data from a minimum of three (3) different locations and three (3) harvest years from the same seeding at each location (does not include harvests in the year of seeding is required for support for registration. One of three locations can be from another prairie province. For annual or biennial species, a minimum of four (4) station years of data from two (2) different locations and two (2) harvests from each location is required for support for registration. Supporting performance data from comparable environments may be included in the submission for consideration with respect to agronomic performance other than yield. Background information on the variety may be required.

NOTE: No more than two thirds (2/3) of the data used for support for registration should come from single source private trials; a minimum of one third (1/3) of the data used should be generated from independent trials in Alberta.

The minimum criterion for support for registration is that the average forage yield of the candidate variety be numerically equal to or better than the check or standard varieties. If the variety is outstanding in some other characteristic(s) which would fulfill a need not already met by existing registered varieties, then a yield equal to or in some cases less than the check varieties may be acceptable.

NOTE: Support for variety registration will remain in effect until the next annual meeting of the AFVC. If a company has not proceeded with an application for registration with the Animal and Plant Health Directorate within that time, it must reapply.

6. Requirements specifically for adaptation in Alberta:

For perennial species, a minimum of six (6) station years of data is required from two (2) different locations and three (3) harvest years from the same seeding (does not include harvests in the year of seeding) in each soil - climatic area. For annual and biennial species, a minimum of six (6) station years of data is required from two (2) different locations and three (3) different harvest years in each soil-climatic area. The soil climatic areas of Alberta are detailed on the map on page 7. Irrigation is a separate category.

The name and address of the Canadian distributor of the variety must be indicated. Adequate seed supply must be available.

7. For perennial species, the variety must also be equal or superior to the check in persistence, based on three (3) consecutive winters after establishment.
8. If the variety shows definite superiority or merit in some significant characteristic or special adaptation (*e.g.* verticillium wilt resistance in alfalfa) it is eligible for consideration even though its dry matter yield may be numerically below that of the check. Characteristics may include adaptation to problem soils, disease resistance, insect resistance, drought resistance, seedling vigour, quality, maturity, and tolerance to frequent grazing. It is essential that a standard for the level of disease resistance or other factors be established if the check does not have this particular attribute. These standards will be adjusted as varieties with superior adaptation or resistance become available.
9. All pertinent agronomic data must be reported. Data may also be given as a percentage of a standard of check variety if actual data on the standard or check varieties are given.
10. A detailed description of the variety indicating its agronomic, morphological, physiological, and quality characteristics must be included in the submission. These characteristics may include such traits as low alkaloid levels, creeping

rootedness, winter hardiness, improved feeding quality, anti-quality factors, and tolerance to frequent grazing.

B. Standard Testing Procedures for Variety Evaluation.

1. The same standard variety or varieties to be included in each varietal test.
2. The varietal test to be established on the randomized block experimental design.
3. Plots must be no less than 1.2 m x 6 m and replicated no less than four (4) times. The minimum harvested area will be 3 m² with a minimum 30-cm guard around each plot. Row seeded plots will have a minimum of 4 rows with the outer rows as guards.
4. All plots should be harvested under a common cutting management. Where significant maturity differences exist and check varieties have been specified, harvesting management should be consistent within a maturity group with a common check.
5. Dry matter determinations should be made for each plot. Legumes for hay should be harvested at the late bud to early bloom stage of maturity, while grasses for hay should be harvested when the head is just out of the boot and the flag leaf is separated from the bottom of the head. Additional harvests will be obtained at the discretion of the evaluator. For annuals and biennials, each species should be harvested at the appropriate stage for intended use, *e.g.* silage - cereals 3-4 weeks after heading.
6. Type and fertility of soils should be determined. It should be representative of the geographical area.
7. Date of seeding, rate of seeding as based on pure live seed, fertilizer rates and date of application, herbicide rates and dates of application, dates of harvest, and any other relevant management details (*e.g.* irrigation) should be carefully recorded.
8. All forage yield data to be reported in kg/ha on a dry matter basis.
9. Data with a coefficient of variation (CV) over 25% will be accepted at the discretion of the Alberta Forage Variety Committee. Use of this data may alter field averages sufficiently to cause misinterpretation of varietal performance. Therefore, it may not be accepted.
10. Notes on stand density after seeding, winter survival, spring vigour, diseases, insect damage, and other pertinent information is to be recorded.

11. Results for all entries in each varietal test are to be compiled and summarized before submission to the co-ordinator of the AFVC.

- a) All test results from Alberta of the variety under consideration must be included.
- b) Private test results can be maintained for the exclusive use of the company or individual doing the testing. Data from private tests will not be used by the AFVC for making recommendations on varieties from another company or individual unless the applicant of that other variety has written approval from the private evaluator.

12. Standard perennial varieties currently used in testing:

Alfalfa	Anchor (Flemish type)
	Beaver (Standard type)
	Rambler (Dryland type)
Alsike clover	Aurora
Red clover	Altaswede
White clover (tall growing)	California Ladino
Cicer milkvetch	Oxley
Sainfoin	Nova
Yellow sweetclover	Norgold
Bird'sfoot trefoil	Leo
Kentucky bluegrass	Troy
Meadow brome grass	Fleet
Smooth brome grass	Carlton
Creeping red fescue	Boreal
Meadow fescue	Ensign
Tall fescue	Courtenay
Meadow foxtail	Dan
Orchard grass	Kay
Perennial ryegrass	Norlea
Timothy	Climax
Crested wheatgrass	Kirk
Intermediate wheatgrass	Chief
Northern wheatgrass	Elbee
Pubescent wheatgrass	Greenleaf
Slender wheatgrass	Revenue
Streambank wheatgrass	Sodar
Tall wheatgrass	Orbit
Western wheatgrass	Walsh
Altai wildrye	Prairieland
Russian wildrye	Swift

NOTE: Guideline changes affecting testing procedures will be implemented following a three (3)-year transition period. For example, if it is considered that a standard variety is unsuitable and should be replaced, a transition period for three (3) years from the date of change will be in effect for all existing variety trials containing the standard variety to be replaced.

V. APPEALS

The appeal committee will consist of the following AFVC members:

Chairman, C.S.T.A. member, Co-ordinator

The Secretary of the AFVC will be present to record proceedings.

In addition technical consultants may be in attendance at appeal meetings as required. If the C.S.T.A. member is directly or indirectly in conflict, the C.S.T.A. alternate member will sit on the appeal committee in his place.

The sponsor will be invited to present restatement of the case of the variety in person or in writing. A written statement concerning the decision by the appeal committee will be forwarded to the sponsor within two weeks of the appeal.

VI. WITHDRAWAL FROM THE FORAGE CROP VARIETY LIST

As new varieties become available, some of the older or less productive varieties may be removed from the list because:

1. A company with exclusive distribution rights requests removal.
2. Seed supply (commercial) of the variety is not adequate or available.
3. The variety is found to be inferior to the check in an agronomically important characteristic. For example, disease or insect resistance, persistence, or yield potential. If the variety yields less than 90% of the yield of the current check, it will be considered to be inferior in yield.
4. The variety is removed from the Canadian list of registered varieties.

Intent to remove a variety from the list due to point #2 or #3 will be communicated to the distributor of the variety.

ALFALFA 1993 BOW ISLAND - AREA 1

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 13JUN96	CUT 2 01AUG96	CUT 3		
ANCHOR	5674	4100		9774	104
5151	5719	3729		9448	101
BEAVER	5651	3707		9358	100
5262	5121	3934		9055	97
MULTIKING 1	4607	3827		8434	90
DART	4748	3601		8350	89
PICKSEED 8920 MF	4346	3962		8308	89
5246	4427	3873		8300	89
STARMASTER	4179	3740		7919	85
PROWLER 1	4312	3489		7801	83
LEGEND 2	3797	3339		7136	76
ENCORE	3652	3373		7025	75
MEAN	4686	3723		8409	
CV(%)	11.1	13.4		11.1	
LSD(0.05)	748	NS		1349	

ALFALFA 1995 BOW ISLAND - AREA 1

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 13JUN96	CUT 2 01AUG96	CUT 3		
ANCHOR	6288	4222		10511	101
BEAVER	6164	4230		10394	100
AC NORDICA	5875	4452		10328	99
RAMBLER	6534	3280		9813	94
MAGNUM III	5579	4200		9779	94
AC BLUE J	5808	3800		9608	92
20/20	5597	4005		9602	92
630	5276	4105		9380	90
DK 122	4634	4361		8995	87
PROFIT	5085	3861		8945	86
5312	5132	3800		8933	86
ABSOLUTE	5093	3804		8897	86
5454	4949	3735		8684	84
MEAN	5540	3989		9528	
CV(%)	6.4	10.7		6.3	
LSD(0.05)	509	611		863	

ALFALFA 1994 BROOKS - AREA 1

VARIETY	1996 DM YIELD KG/HA			% OF BEAVER
	CUT 1 08JUL96	CUT 2	CUT 3	
			TOTAL	
RAMBLER	2056		2056	165
HEINRICHS	1978		1978	159
RANGELANDER	1791		1791	144
SPREDOR 3	1770		1770	142
SPREDOR 2	1745		1745	140
ALOUETTE	1725		1725	139
ALGONQUIN	1722		1722	138
5311	1682		1682	135
OAC MINTO	1641		1641	132
ANCHOR	1613		1613	130
5364	1566		1566	126
AC CARIBOU	1559		1559	125
526	1531		1531	123
IMPACT	1511		1511	121
CRUSADER	1424		1424	114
PEACE	1420		1420	114
CENTURION	1361		1361	109
STAMPEDER	1280		1280	103
VIKING 1	1250		1250	100
BEAVER	1244		1244	100
SURE	1195		1195	96
GARST 636	1039		1039	84
MEAN	1550		1550	
CV(%)	23.5		23.5	
LSD(0.05)	515		515	

ALFALFA 1995 BROOKS - AREA 1

VARIETY	1996 DM YIELD KG/HA			T OF BEAVER
	CUT 1 08JUL96	CUT 2	CUT 3 TOTAL	
20/20	2999		2999	125
RAMBLER	2427		2427	101
BEAVER	2396		2396	100
AC NORDICA	2076		2076	87
ABSOLUTE	1882		1882	79
5312	1799		1799	75
AC BLUE J	1668		1668	70
ANCHOR	1662		1662	69
630	1654		1654	69
MAGNUM III	1616		1616	67
DK 122	1492		1492	62
PROFIT	1419		1419	59
5454	1418		1418	59
MEAN	1885		1885	
CV(%)	38.7		38.7	
LSD(0.05)	NS		NS	

ALPALFA 1994 OYEN - AREA 1

VARIETY	1996 DM YIELD KG/HA			t OF BEAVER
	CUT 1 08JUL96	CUT 2 19AUG96	CUT 3 TOTAL	
GARST 636	2880	919	3799	112
526	2775	1002	3776	111
RANGELANDER	3212	547	3760	111
ALOUETTE	2667	1082	3750	111
STAMPEDER	2524	979	3504	103
SPREDOR 3	2643	804	3447	102
5311	2233	1196	3429	101
RAMBLER	2143	1260	3403	100
BEAVER	2327	1063	3390	100
IMPACT	2297	928	3225	95
CENTURION	2530	690	3220	95
VIKING 1	2387	829	3216	95
ANCHOR	2119	1077	3196	94
CRUSADER	2290	842	3132	92
5364	2135	995	3130	92
PEACE	2081	1005	3085	91
SURE	2304	699	3003	89
ALGONQUIN	2038	876	2914	86
SPREDOR 2	2088	820	2908	86
HEINRICHS	1795	979	2774	82
AC CARIBOU	1809	960	2770	82
OAC MINTO	1658	1058	2715	80
MEAN	2315	937	3252	
CV (%)	32.3	25.6	22.9	
LSD (0.05)	NS	339	NS	

ALFALFA 1995 OYEN - AREA 1

VARIETY	1996 DM YIELD KG/HA			‡ OF BEAVER
	CUT 1 02JUL96	CUT 2 19AUG96	CUT 3 TOTAL	
630	2949	1531	4480	118
ABSOLUTE	3019	1095	4114	109
AC BLUE J	2944	1156	4100	108
RAMBLER	3052	754	3805	100
BEAVER	2832	956	3788	100
PROFIT	2743	1034	3777	100
AC NORDICA	2647	1108	3754	99
20/20	2665	1064	3730	98
MAGNUM III	2742	966	3708	98
5454	2501	1117	3618	96
ANCHOR	2384	980	3364	89
5312	2227	1022	3249	86
DK 122	2199	859	3058	81
MEAN	2685	1049	3734	
CV (%)	15.5	30.2	15.4	
LSD (0.05)	NS	NS	NS	

ALFALFA 1992 PROVOST - AREA 2

VARIETY	1996 DM YIELD KG/HA			‡ OF BEAVER
	CUT 1 16JUL96	CUT 2 12SEP96	CUT 3 TOTAL	
ANCHOR	2171	521	2692	103
BEAVER	2134	468	2602	100
MULTIKING 1	1940	427	2367	91
5262	1854	467	2321	89
PICKSEED 8920 MF	1699	231	1930	74
STARMASTER	1419	255	1674	64
MEAN	1870	395	2264	
CV(%)	28.6	26.1	25.4	
LSD(0.05)	NS	155	NS	

ALFALFA 1993 PROVOST - AREA 2

VARIETY	1996 DM YIELD KG/HA			‡ OF BEAVER
	CUT 1 16JUL96	CUT 2 12SEP96	CUT 3 TOTAL	
BEAVER	2847	611	3458	100
ANCHOR	2502	787	3290	95
5246	2006	939	2945	85
5151	1986	621	2606	75
DART	1852	563	2415	70
LEGEND 2	1734	593	2327	67
ENCORE	1589	515	2103	61
PROWLER 1	1498	509	2007	58
MEAN	2002	642	2644	
CV(%)	34.8	37.8	31.6	
LSD(0.05)	NS	NS	NS	

ALFALFA 1993 STANDARD - AREA 2

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 09JUL96	CUT 2 04OCT96	CUT 3		
BEAVER	6193	1595		7788	100
5151	5660	1145		6805	87
5246	5320	1392		6713	86
ANCHOR	5101	1599		6700	86
ENCORE	5068	1608		6676	86
PROWLER 1	5291	1353		6644	85
DART	4682	1531		6214	80
LEGEND 2	4627	1018		5645	72
MEAN	5243	1405		6648	
CV(%)	14.8	14.3		13.1	
LSD (0.05)	NS	295		NS	

ALFALFA 1995 STANDARD - AREA 2

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 09JUL96	CUT 2 04OCT96	CUT 3		
BEAVER	6512	2425		8936	100
RAMBLER	6680	1991		8672	97
AC NORDICA	6269	2295		8564	96
20/20	6107	2398		8505	95
DK 122	5849	2589		8439	94
630	5726	2619		8345	93
ABSOLUTE	5953	2331		8344	93
5312	5674	2601		8275	93
MAGNUM III	5761	2477		8237	92
ANCHOR	5850	2362		8212	92
5454	5715	2443		8158	91
VIKING 1	5395	2691		8086	90
SPREDOR 3	6043	2021		8064	90
AC BLUE J	5198	2162		7360	82
MEAN	5909	2390		8300	
CV(%)	12.0	12.9		11.0	
LSD (0.05)	NS	NS		NS	

ALFALFA 1993 OLDS - AREA 3

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 06JUN96	CUT 2 13AUG96	CUT 3		
ANCHOR	3288	6294		9582	115
5151	3959	5369		9328	112
ENCORE	3191	5851		9042	108
DART	3639	5255		8894	107
PROWLER 1	3668	5070		8737	105
5246	3632	4867		8499	102
BEAVER	3466	4875		8340	100
LEGEND 2	3488	4771		8259	99
MEAN	3541	5294		8835	
CV (%)	15.9	18.9		12.5	
LSD (0.05)	NS	NS		NS	

ALFALFA 1994 OLDS - AREA 3

* Seeded in 1995 *

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 26JUN96	CUT 2 13AUG96	CUT 3		
5262	4727	6176		10903	107
MULTIKING 1	4574	6213		10787	105
STARMASTER	4590	5988		10578	103
PICKSEED 8920 MF	4588	5973		10561	103
VIKING 1	4145	6210		10355	101
ANCHOR	4521	5830		10352	101
BEAVER	4606	5621		10227	100
SPREDOR 3	4356	5797		10153	99
HEINRICHS	4596	5447		10043	98
RAMBLER	4494	4507		9000	88
MEAN	4520	5776		10296	
CV (%)	8.7	7.2		5.3	
LSD (0.05)	NS	602		798	

ALFALFA 1995 OLDS - AREA 3

VARIETY	1996 DM YIELD KG/HA				% OF BEAVER
	CUT 1 26JUN96	CUT 2 12AUG96	CUT 3	TOTAL	
BEAVER	4628	7324		11953	100
20/20	4832	6677		11510	96
DK 122	4634	6733		11367	95
5454	4997	6335		11332	95
AC NORDICA	4743	6499		11242	94
ANCHOR	4523	6662		11185	94
MAGNUM III	4541	6508		11049	92
AC BLUE J	4426	6525		10951	92
ABSOLUTE	4491	6269		10760	90
5312	4417	6215		10633	89
630	4674	5914		10588	89
RAMBLER	4472	4797		9270	78
MEAN	4615	6372		10987	
CV (%)	8.0	12.8		8.7	
LSD (0.05)	NS	1172		NS	

ALFALFA 1993 VEGREVILLE - AREA 3

VARIETY	1996 DM YIELD KG/HA				% OF BEAVER
	CUT 1 18JUL96	CUT 2 24SEP96	CUT 3	TOTAL	
5151	3066	1409		4475	101
BEAVER	3084	1339		4423	100
DART	3005	1075		4080	92
5246	2922	1086		4008	91
ANCHOR	2613	1170		3783	86
LEGEND 2	2816	644		3460	78
PROWLER 1	2556	821		3377	76
ENCORE	2622	695		3317	75
MEAN	2835	1030		3865	
CV (%)	17.1	27.8		15.1	
LSD (0.05)	NS	420		859	

ALFALFA 1992 FORT KENT - AREA 4

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 22JUL96	CUT 2 27SEP96	CUT 3		
ANCHOR	5544	2192		7736	105
BEAVER	5691	1645		7336	100
5262	4803	2109		6912	94
PICKSEED 8920 MF	5539	1201		6740	92
STARMASTER	4634	1912		6546	89
MULTIKING 1	4908	1615		6523	89
MEAN	5186	1779		6966	
CV(%)	18.8	23.7		15.1	
LSD(0.05)	NS	635		NS	

ALFALFA 1993 FORT KENT - AREA 4

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 22JUL96	CUT 2 27SEP96	CUT 3		
BEAVER	3856	1732		5588	100
DART	3663	1785		5448	97
5151	3849	1574		5423	97
ANCHOR	3612	1733		5345	96
ENCORE	3479	1589		5068	91
PROWLER 1	3391	1511		4902	88
LEGEND 2	3808	1023		4831	86
5246	3352	1321		4673	84
MEAN	3626	1533		5160	
CV(%)	15.9	28.5		15.1	
LSD(0.05)	NS	NS		NS	

ALFALFA 1992 WESTLOCK - AREA 4

VARIETY	1996 DM YIELD KG/HA			T OF BEAVER
	CUT 1 01AUG96	CUT 2 22OCT96	CUT 3 TOTAL	
5262	3191	3617	6808	120
ANCHOR	3630	3112	6742	119
BEAVER	3583	2068	5651	100
STARMaster	2794	2125	4919	87
PICKSEED 8920 MF	2273	2261	4534	80
MULTIKING 1	2608	1760	4368	77
MEAN	3013	2491	5504	
CV(%)	22.9	35.7	20.1	
LSD(0.05)	NS	NS	1669	

ALFALFA 1993 BEAVERLODGE - AREA 5

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 10JUL96	CUT 2 27AUG96	CUT 3		
AC CARIBOU	3825	1815		5640	114
HEINRICHS	3927	1551		5479	111
SPREDOR 2	3467	1987		5454	110
5246	3451	1848		5298	107
RAMBLER	3724	1525		5250	106
STAMPEDER	3490	1754		5244	106
ANCHOR	3296	1945		5241	106
STARMASTER	3208	1979		5186	105
5364	3313	1839		5153	104
GARST 636	3389	1727		5116	104
ALGONQUIN	3229	1846		5075	103
MULTIKING 1	3238	1828		5066	103
DART	3159	1847		5006	101
PICKSEED 8920 MF	3420	1582		5002	101
BEAVER	3584	1352		4936	100
CENTURION	3193	1710		4903	99
5262	3352	1535		4887	99
LEGEND 2	3079	1776		4854	98
PEACE	3262	1565		4827	98
5151	3339	1381		4720	96
ANIK	3379	1331		4710	95
SURE	3080	1559		4639	94
ENCORE	3150	1468		4618	94
ALOUETTE	2988	1628		4616	94
PROWLER 1	2730	1339		4069	82
MEAN	3331	1669		5000	
CV (%)	15.3	35.2		19.6	
LSD (0.05)	NS	NS		NS	

ALFALFA 1994 FALHER - AREA 5

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF BEAVER
	CUT 1 17JUL96	CUT 2	CUT 3		
PROWLER 1	5634			5634	127
LEGEND 2	5398			5398	122
CENTURION	5371			5371	121
5262	5357			5357	121
SURE	5285			5285	119
PICKSEED 8920 MF	5279			5279	119
ANCHOR	5198			5198	118
ANIK	5190			5190	117
5364	5132			5132	116
GARST 636	4990			4990	113
SPREDOR 2	4923			4923	111
RAMBLER	4917			4917	111
STAMPEDER	4897			4897	111
HEINRICHS	4896			4896	111
5151	4869			4869	110
ENCORE	4765			4765	108
MULTIKING 1	4691			4691	106
STARMASER	4675			4675	106
DART	4628			4628	105
ALGONQUIN	4611			4611	104
5246	4534			4534	103
BEAVER	4423			4423	100
AC CARIBOU	4256			4256	96
PEACE	4161			4161	94
ALOUETTE	4158			4158	94
MEAN	4889			4889	
CV(%)	16.4			16.4	
LSD (0.05)	NS			NS	

ALFALFA 1993 BOW ISLAND - AREA IRR

VARIETY	1996 DM YIELD KG/HA				% OF BEAVER
	CUT 1 12JUN96	CUT 2 31JUL96	CUT 3 25SEP96	TOTAL	
5262	6576	6393	2761	15730	125
ANCHOR	5967	6522	2543	15032	119
5246	5563	6701	2737	15001	119
MULTIKING 1	5552	6404	2684	14640	116
STARMASTER	5202	6636	2741	14579	116
ENCORE	4854	6940	2703	14497	115
LEGEND 2	5230	6379	2746	14355	114
DART	5116	6298	2724	14139	112
5151	5632	6206	2139	13977	111
PROWLER 1	5056	6295	2478	13828	110
PICKSEED 8920 MF	4630	6624	2569	13823	110
BEAVER	5342	5815	1436	12593	100
MEAN	5393	6435	2522	14350	
CV(%)	11.1	7.6	10.7	7.0	
LSD(0.05)	863	NS	387	1449	

ALFALFA 1995 BOW ISLAND - AREA IRR

VARIETY	1996 DM YIELD KG/HA				% OF BEAVER
	CUT 1 12JUN96	CUT 2 01AUG96	CUT 3 27SEP96	TOTAL	
ABSOLUTE	5977	7932	3805	17714	105
AC BLUE J	6125	7895	3471	17491	104
20/20	6481	6993	3634	17107	102
5454	6201	7664	3204	17068	102
630	6268	7222	3532	17022	101
VIKING 1	5755	7468	3755	16978	101
BEAVER	6433	7412	2953	16799	100
AC NORDICA	5853	7077	3369	16310	97
ANCHOR	5944	7219	3140	16304	97
5312	5726	6956	3548	16229	97
MAGNUM III	5820	6860	3338	16018	95
DK 122	5122	6995	3425	15542	93
SPREDOR 3	5753	7118	2553	15425	92
RAMBLER	5278	7191	1243	13712	82
MEAN	5910	7286	3212	16408	
CV(%)	11.2	9.7	10.0	7.7	
LSD(0.05)	NS	NS	457	1807	

ALFALFA 1993 BROOKS - AREA IRR

VARIETY	1996 DM YIELD KG/HA				% OF BEAVER
	CUT 1 10JUN96	CUT 2 08AUG96	CUT 3 03OCT96	TOTAL	
5262	4806	6385	3416	14607	108
ANCHOR	4843	6622	3054	14519	107
5151	4942	6289	3214	14445	107
ENCORE	3757	7045	3628	14430	106
PROWLER 1	4490	6414	3000	13904	103
PICKSEED 8920 MF	4218	6487	3176	13881	102
5246	4376	5921	3544	13842	102
STARMASTER	4012	6536	3155	13703	101
BEAVER	4614	6189	2755	13559	100
DART	3392	6580	3579	13550	100
MULTIKING 1	3572	6553	3115	13241	98
LEGEND 2	3921	6041	3247	13208	97
MEAN	4245	6422	3240	13907	
CV(%)	13.5	10.3	16.1	8.8	
LSD (0.05)	967	NS	NS	NS	

ALFALFA 1995 BROOKS - AREA IRR

VARIETY	1996 DM YIELD KG/HA				% OF BEAVER
	CUT 1 10JUN96	CUT 2 09AUG96	CUT 3 03OCT96	TOTAL	
20/20	5564	6734	3697	15995	115
5312	5621	6241	3680	15542	111
ABSOLUTE	4976	6691	3631	15298	110
630	5288	6254	3387	14928	107
ANCHOR	5502	6065	3125	14692	105
AC BLUE J	5108	6285	3136	14529	104
5454	4891	6353	3203	14447	103
AC NORDICA	5079	6273	3062	14414	103
VIKING 1	4661	6078	3502	14242	102
BEAVER	5152	6128	2687	13967	100
MAGNUM III	4773	5795	2974	13542	97
DK 122	4638	5587	3205	13429	96
SPREDOR 3	4831	5911	2040	12781	92
RAMBLER	5192	5837	673	11702	84
MEAN	5091	6159	3000	14251	
CV(%)	7.7	10.8	12.3	7.0	
LSD (0.05)	557	NS	528	1434	

MEADOW BROMEGRASS 1994 BROOKS - AREA 1

VARIETY	1996 DM YIELD KG/HA				% OF FLEET
	CUT 1 08JUL96	CUT 2	CUT 3	TOTAL	
FLEET	1080			1080	100
REGAR	1070			1070	99
Paddock	927			927	86
MEAN	1026			1026	
CV(%)	9.3			9.3	
LSD(0.05)	NS			NS	

MEADOW BROMEGRASS 1993 BEAVERLODGE - AREA 5

VARIETY	1996 DM YIELD KG/HA				% OF FLEET
	CUT 1 25JUN96	CUT 2 27AUG96	CUT 3	TOTAL	
Paddock	1911	947		2857	102
FLEET	1897	896		2793	100
REGAR	1792	909		2702	97
MEAN	1867	917		2784	
CV(%)	8.3	10.5		6.3	
LSD(0.05)	NS	NS		NS	

MEADOW BROMEGRASS 1993 HIGH PRAIRIE - AREA 5

VARIETY	1996 DM YIELD KG/HA				% OF FLEET
	CUT 1 09JUL96	CUT 2 12SEP96	CUT 3	TOTAL	
REGAR	4657	1468		6125	102
Paddock	4654	1456		6110	102
FLEET	4568	1442		6010	100
MEAN	4626	1455		6082	
CV (%)	5.5	12.9		3.9	
LSD (0.05)	NS	NS		NS	

MEADOW BROMEGRASS 1994 HIGH PRAIRIE - AREA 5

VARIETY	1996 DM YIELD KG/HA				% OF FLEET
	CUT 1 09JUL96	CUT 2 12SEP96	CUT 3	TOTAL	
FLEET	6537	2334		8871	100
REGAR	6018	2481		8499	96
Paddock	6065	2343		8408	95
MEAN	6207	2386		8593	
CV (%)	11.0	11.7		10.5	
LSD (0.05)	NS	NS		NS	

SMOOTH BROMEGRASS 1993 BEAVERLODGE - AREA 5

VARIETY	1996 DM YIELD KG/HA			% OF CARLTON
	CUT 1 25JUN96	CUT 2 27AUG96	CUT 3 TOTAL	
RADISSON	3271	521	3791	117
MANCHAR	2656	689	3345	103
CARLTON	2704	534	3237	100
BRAVO	2609	525	3135	97
BAYLOR	2600	527	3127	97
REBOUND	2455	630	3085	95
MAGNA	2479	433	2912	90
SIGNAL	2340	502	2842	88
MEAN	2639	545	3184	
CV (%)	18.9	20.6	15.7	
LSD (0.05)	NS	NS	NS	

SMOOTH BROMEGRASS 1993 HIGH PRAIRIE - AREA 5

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF CARLTON
	CUT 1 09JUL96	CUT 2 12SEP96	CUT 3		
BAYLOR	6747	1338		8085	149
MAGNA	6398	901		7298	134
BRAVO	5812	1005		6817	125
SIGNAL	5725	932		6657	122
RADISSON	5438	1025		6463	119
REBOUND	5118	987		6106	112
MANCHAR	5070	986		6055	111
CARLTON	4651	789		5440	100
MEAN	5620	995		6615	
CV(%)	9.4	26.3		11.0	
LSD (0.05)	924	NS		1279	

SMOOTH BROMEGRASS 1994 HIGH PRAIRIE - AREA 5

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF CARLTON
	CUT 1 09JUL96	CUT 2 12SEP96	CUT 3		
SIGNAL	8308	1895		10203	108
RADISSON	7891	2045		9937	105
BRAVO	7583	2336		9918	105
BAYLOR	7604	2298		9902	105
MAGNA	7589	1897		9486	100
CARLTON	7448	2020		9468	100
REBOUND	6653	2209		8862	94
MANCHAR	5680	2283		7963	84
MEAN	7344	2123		9467	
CV(%)	10.9	10.6		8.4	
LSD (0.05)	1182	332		1164	

ORCHARD GRASS 1995 OLDS - AREA 3

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF KAY
	CUT 1 02JUL96	CUT 2 13AUG96	CUT 3		
AC NORDIC	6299	3232		9531	106
JAY	6277	3087		9363	105
AC SPLENDOR	5378	3920		9298	104
ARCTIC	6238	3042		9280	104
OKAY	5950	3140		9090	101
KAY	5741	3219		8960	100
DS7	5046	3730		8776	98
FRODE	4278	4119		8397	94
NAPIER	4271	3388		7659	85
MOBITE	4179	3460		7639	85
JUNO	3997	3542		7539	84
POTOMAC	4004	3482		7486	84
CHINOOK	4546	2680		7226	81
MEAN	5092	3388		8480	
CV(%)	16.9	18.2		13.5	
LSD(0.05)	1231	NS		1638	

ORCHARD GRASS 1995 ELLERSLIE - AREA 3

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF KAY
	CUT 1 14JUL96	CUT 2 12SEP96	CUT 3		
AC NORDIC	4777	5448		10225	106
POTOMAC	4671	5079		9750	101
KAY	5460	4232		9691	100
OKAY	5200	4384		9585	99
ARCTIC	5088	4310		9398	97
MOBITE	4466	4845		9311	96
AC SPLENDOR	4465	4807		9272	96
FRODE	4388	4840		9228	95
DS7	4331	4891		9222	95
NAPIER	3918	4961		8880	92
CHINOOK	4054	4004		8058	83
JAY	3747	4251		7998	83
JUNO	3728	4242		7969	82
MEAN	4484	4638		9122	
CV(%)	26.9	15.2		15.5	
LSD(0.05)	NS	NS		NS	

TIMOTHY 1995 OLDS - AREA 3

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF CLIMAX
	CUT 1 02JUL96	CUT 2 22AUG96	CUT 3		
COLT	7625	4286		11911	109
BASHO	7807	4002		11808	108
CAROLA	7841	3772		11613	106
BOTTNIA II	8554	3022		11576	106
TILLER	7356	4002		11358	104
WINMOR	7709	3648		11356	104
HOKUO	7077	4009		11087	101
ARGUS	7648	3370		11018	101
CLIMAX	7151	3778		10929	100
CHAMP	7086	3830		10916	100
ALEXANDER	7132	3727		10860	99
PROMESSE	7782	3074		10856	99
ITASCA	7125	3717		10842	99
TIITI	7659	3087		10746	98
SAGUENAY	7243	3417		10660	98
BEAUPRE	7273	3375		10648	97
ALMA	7271	3363		10634	97
RICHMOND	7477	3077		10554	97
GLENMOR	6940	3190		10131	93
TIMFOR	6828	3113		9941	91
MEAN	7429	3543		10972	
CV(%)	8.3	13.9		5.9	
LSD(0.05)	NS	698		917	

TIMOTHY 1993 BEAVERLODGE - AREA 5

VARIETY	1996 DM YIELD KG/HA			% OF CLIMAX
	CUT 1. 28JUN96	CUT 2	CUT 3	
BOTTNIA II	4108			113
ENGMO	3785			104
ITASCA	3775			104
BASHO	3723			102
ALMA	3670			101
CLIMAX	3639			100
CHAMP	3610			99
TIITI	3606			99
BOUNTY	3537			97
TIMFOR	3515			97
ARGUS	3507			96
RICHMOND	3453			95
CAROLA	3343			92
TILLER	3334			92
WINMOR	3215			88
GLENMOR	3080			85
MEAN	3556			3556
CV(%)	8.0			8.0
LSD(0.05)	406			406

TIMOTHY 1994 HIGH PRAIRIE - AREA 5

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF CLIMAX
	CUT 1 09JUL96	CUT 2 12SEP96	CUT 3		
CLIMAX	7366	2246		9611	100
TILLER	6921	2522		9443	98
CHAMP	6174	3106		9280	97
CAROLA	7229	2046		9275	97
TIMFOR	7022	2142		9164	95
BOUNTY	6468	2462		8930	93
ARGUS	7070	1809		8879	92
ITASCA	7028	1788		8816	92
RICHMOND	6625	2179		8804	92
WINMOR	6928	1872		8801	92
BASHO	6651	1797		8448	88
ALMA	7163	1215		8377	87
NOSAPPU	6328	1995		8323	87
HOKUSYU	6737	1567		8304	86
TIITI	6434	1767		8201	85
BOTTNIA II	6159	1302		7461	78
ENGMO	6183	1096		7279	76
MEAN	6734	1936		8670	
CV(%)	10.7	31.9		10.8	
LSD(0.05)	NS	877		1335	

TIMOTHY 1994 BOW ISLAND - AREA IRR

VARIETY	1996 DM YIELD KG/HA			% OF CLIMAX
	CUT 1 12JUN96	CUT 2 31JUL96	CUT 3 TOTAL	
CLIMAX	4159	4605	8764	100
HOKUSYU	3222	4960	8182	93
NOSAPPU	4082	4048	8129	93
BOTTNIA II	4610	3154	7764	89
ALMA	4261	2870	7131	81
MEAN	4067	3927	7994	
CV (%)	9.6	8.4	6.1	
LSD (0.05)	600	506	746	

TIMOTHY 1995 BOW ISLAND - AREA IRR

VARIETY	1996 DM YIELD KG/HA			% OF CLIMAX
	CUT 1 12JUN96	CUT 2 01AUG96	CUT 3 TOTAL	
ITASCA	3108	4893	8001	113
HOKUO	2954	4869	7823	111
BASHO	2940	4828	7768	110
RICHMOND	2654	5093	7747	110
COLT	2763	4948	7711	109
BEAUPRE	3211	4398	7609	108
ALEXANDER	2422	5103	7524	107
CHAMP	2753	4727	7480	106
TIMFOR	2562	4833	7395	105
CAROLA	2750	4635	7386	105
ARGUS	2707	4455	7162	101
CLIMAX	2536	4528	7064	100
BOTTNIA II	3254	3787	7041	100
PROMESSE	2867	4145	7012	99
WINMOR	2361	4644	7005	99
GLENMOR	2181	4686	6867	97
SAGUENAY	3020	3820	6839	97
ALMA	2997	3813	6811	96
TILLER	2417	4292	6709	95
TIITI	2480	3754	6234	88
MEAN	2747	4513	7259	
CV (%)	13.7	15.6	11.9	
LSD (0.05)	532	NS	NS	

TIMOTHY 1994 BROOKS - AREA IRR

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF CLIMAX
	CUT 1 14JUN96	CUT 2 08AUG96	CUT 3		
CLIMAX	4358	4340		8699	100
HOKUSYU	4161	4454		8615	99
NOSAPPU	4057	4288		8345	96
BOTTNIA II	4975	2998		7973	92
ALMA	4541	3303		7844	90
MEAN	4418	3877		8295	
CV(%)	7.0	11.3		4.7	
LSD(0.05)	583	822		NS	

TIMOTHY 1995 BROOKS - AREA IRR

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF CLIMAX
	CUT 1 14JUN96	CUT 2 09MAY96	CUT 3		
ARGUS	5416	5042		10458	119
CAROLA	4727	5666		10392	118
BEAUPRE	5624	4595		10219	116
SAGUENAY	5390	4665		10055	114
COLT	4845	5151		9996	114
RICHMOND	5239	4671		9910	113
ITASCA	5386	4505		9891	112
GLENMOR	4259	5329		9587	109
TIMFOR	5012	4574		9586	109
HOKUO	4702	4742		9444	107
CHAMP	4832	4397		9230	105
ALEXANDER	4654	4550		9203	105
WINMOR	4695	4506		9201	105
TILLER	4662	4521		9183	104
TIITI	4911	4042		8953	102
BOTTNIA II	5266	3547		8813	100
CLIMAX	4813	3989		8802	100
BASHO	4694	4023		8718	99
PROMESSE	4311	4260		8571	97
ALMA	4791	3401		8192	93
MEAN	4911	4509		9420	
CV(%)	11.7	13.2		8.6	
LSD(0.05)	NS	986		1343	

CRESTED WHEATGRASS 1994 BROOKS - AREA 1

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF KIRK
	CUT 1 08JUL96	CUT 2	CUT 3		
KIRK	1520			1520	100
NORDAN	1475			1475	97
PARKWAY	1331			1331	88
FAIRWAY	976			976	64
MEAN	1325			1325	
CV(%)	9.8			9.8	
LSD(0.05)	207			207	

CRESTED WHEATGRASS 1994 OYEN - AREA 1

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF KIRK
	CUT 1 26JUL96	CUT 2	CUT 3		
PARKWAY	2337			2337	111
NORDAN	2167			2167	103
KIRK	2113			2113	100
FAIRWAY	2049			2049	97
MEAN	2167			2167	
CV(%)	10.1			10.1	
LSD(0.05)	NS			NS	

PUB & INTER WHEATGRASS 1994 BROOKS - AREA 1

VARIETY	1996 DM YIELD KG/HA			TOTAL	% OF GREENLEAF
	CUT 1 08JUL96	CUT 2	CUT 3		
CLARKE	1586			1586	101
GREENLEAF	1568			1568	100
CHIEF	1536			1536	98
MEAN	1563			1563	
CV(%)	10.9			10.9	
LSD(0.05)	NS			NS	

WILDRYE 1994 BROOKS - AREA 1

VARIETY	1996 DM YIELD KG/HA			% OF SWIFT
	CUT 1 08JUL96	CUT 2	CUT 3 TOTAL	
SWIFT	1855		1855	100
PRAIRIELAND	1755		1755	95
BEJAY	1670		1670	90
CABREE	1297		1297	70
MAYAK	1104		1104	60
ARTHUR	1091		1091	59
TETRACAN	1077		1077	58
JAMES	678		678	37
MEAN	1316		1316	
CV (%)	24.2		24.2	
LSD (0.05)	469		469	

WILDRYE 1994 OYEN - AREA 1

VARIETY	1996 DM YIELD KG/HA			% OF SWIFT
	CUT 1 26JUL96	CUT 2	CUT 3 TOTAL	
ARTHUR	3248		3248	153
PRAIRIELAND	3233		3233	152
JAMES	3079		3079	145
CABREE	2271		2271	107
MAYAK	2161		2161	102
SWIFT	2127		2127	100
TETRACAN	2077		2077	98
MEAN	2600		2600	
CV (%)	40.4		40.4	
LSD (0.05)	NS		NS	

SUMMARY OF 1993 ALFALFA VARIETIES - AREA 1

VARIETY	Yield as % of BEAVER			
	BOW ISLAND			
	1994	1995	1996	Mean
5151	97	101	101	99
5246	107	107	89	101
5262	103	110	97	103
PICKSEED 8920 MF	105	109	89	101
ANCHOR	97	115	104	105
BEAVER	100	100	100	100
DART	94	102	89	95
ENCORE	103	104	75	94
LEGEND 2	97	104	76	92
MULTIKING 1	95	95	90	93
PROWLER 1	95	110	83	96
STARMASTER	101	104	85	96

CUTS	3	2	2	
CV(%)	6.9	8.6	11.1	
BEAVER (kg/ha)	15763	9270	9357	11464

SUMMARY OF 1994 ALPALFA VARIETIES - AREA 1

VARIETY	Yield as % of BEAVER				
	BROOKS			OYEN	
	1995	1996	Mean	1996	Mean
526	94	123	109	111	111
5311	104	135	119	101	101
5364	82	126	104	92	92
AC CARIBOU	104	125	114	82	82
ALGONQUIN	95	138	117	86	86
ALOUETTE	85	139	112	111	111
ANCHOR	108	130	119	94	94
BEAVER	100	100	100	100	100
CENTURION	79	109	94	95	95
CRUSADER	75	114	95	92	92
GARST 636	86	84	85	112	112
HEINRICHS	103	159	131	82	82
IMPACT	87	121	104	95	95
OAC MINTO	85	132	108	80	80
PEACE	84	114	99	91	91
RAMBLER	90	165	128	100	100
RANGELANDER	82	144	113	111	111
SPREDOR 2	96	140	118	86	86
SPREDOR 3	92	142	117	102	102
STAMPEDER	85	103	94	103	103
SURE	86	96	91	89	89
VIKING 1	84	100	92	95	95

CUTS	1	1		2	
CV(%)	15.3	23.5		22.9	
BEAVER (kg/ha)	2840	1244	2042	3389	3389

SUMMARY OF 1992 ALFALFA VARIETIES - AREA 2

VARIETY	Yield as % of BEAVER				
	PROVOST				
	1993	1994	1995	1996	Mean
5262	100	89	77	89	89
PICKSEED 8920 MF	93	70	70	74	77
ANCHOR	92	88	80	103	91
BEAVER	100	100	100	100	100
MULTIKING 1	89	78	80	91	85
STARMASER	93	61	60	64	69

CUTS	2	1	2	2	
CV(%)	8.0	8.9	20.7	25.4	
BEAVER (kg/ha)	10591	5358	4710	2601	5815

SUMMARY OF 1993 ALFALFA VARIETIES - AREA 2

VARIETY	Yield as % of BEAVER						
	PROVOST			STANDARD			
	1994	1995	Mean	1994	1995	1996	Mean
5151	99	100	100	103	111	87	101
5246	101	72	86	92	85	86	88
ANCHOR	85	90	87	91	89	86	88
BEAVER	100	100	100	100	100	100	100
DART	96	90	93	90	74	80	81
ENCORE	94	61	78	75	59	86	73
LEGEND 2	78	48	63	75	62	72	70
PROWLER 1	89	72	81	95	84	85	88

CUTS	1	2		1	1	2
CV(%)	15.0	20.5		7.7	12.5	13.1
BEAVER (kg/ha)	4610	3149	3879	5624	3594	7787
						5668

SUMMARY OF 1993 ALFALFA VARIETIES - AREA 3

VARIETY	Yield as % of BEAVER							
	OLDS				VEGREVILLE			
	1994	1995	1996	Mean	1994	1995	1996	Mean
5151	94	99	112	102	88	112	101	100
5246	90	91	102	94	84	107	91	94
ANCHOR	102	100	115	106	73	91	86	83
BEAVER	100	100	100	100	100	100	100	100
DART	96	101	107	101	89	102	92	95
ENCORE	93	96	108	99	90	96	75	87
LEGEND 2	101	95	99	98	88	83	78	83
PROWLER 1	97	106	105	103	98	102	76	92

CUTS	2	2	2		2	2	2	
CV(%)	11.3	9.8	12.5		7.6	11.9	15.1	
BEAVER (kg/ha)	6698	11843	8340	8960	10734	5705	4423	6954

SUMMARY OF 1992 ALFALFA VARIETIES - AREA 4

VARIETY	Yield as ‡ of BEAVER								
	FORT KENT					WESTLOCK			
	1993	1994	1995	1996	Mean	1993	1995	1996	Mean
5262	91	96	119	94	100	93	78	120	97
PICKSEED 8920 MF	92	85	94	92	91	80	72	80	78
ANCHOR	97	89	114	105	101	88	97	119	101
BEAVER	100	100	100	100	100	100	100	100	100
MULTIKING 1	95	100	111	89	99	98	71	77	82
STARMASTER	98	93	121	89	100	94	76	87	86

CUTS	1	2	2	2		2	2	2	
CV(‡)	10.3	12.0	14.0	15.1		7.6	17.9	20.1	
BEAVER (kg/ha)	1967	8145	6229	7335	5919	4558	4006	5651	4738

SUMMARY OF 1993 ALFALFA VARIETIES - AREA 4

VARIETY	Yield as ‡ of BEAVER		
	FORT KENT		
	1995	1996	Mean
5151	92	97	94
5246	100	84	92
ANCHOR	92	96	94
BEAVER	100	100	100
DART	102	97	100
ENCORE	93	91	92
LEGEND 2	81	86	84
PROWLER 1	94	88	91

CUTS	2	2	
CV(‡)	14.6	15.1	
BEAVER (kg/ha)	4019	5587	4803

SUMMARY OF 1993 ALFALFA VARIETIES - AREA 5

* Falher seeded in 1994 *

VARIETY	Yield as % of BEAVER						
	BEAVERLODGE				FALHER		
	1994	1995	1996	Mean	1995	1996	Mean
5151	98	92	96	95	99	110	105
5246	107	102	107	105	99	103	101
5262	103	102	99	101	98	121	110
5364	83	97	104	95	101	116	109
PICKSEED 8920 MF	114	99	101	105	98	119	109
AC CARIBOU	122	109	114	115	107	96	101
ALGONQUIN	125	99	103	109	92	104	98
ALOUETTE	88	95	94	92	97	94	96
ANCHOR	96	101	106	101	110	118	114
ANIK	94	82	95	90	65	117	91
BEAVER	100	100	100	100	100	100	100
CENTURION	91	93	99	94	105	121	113
DART	105	100	101	102	110	105	108
ENCORE	90	93	94	92	102	108	105
GARST 636	121	105	104	110	119	113	116
HEINRICHS	129	104	111	115	96	111	103
LEGEND 2	114	96	98	103	101	122	111
MULTIKING 1	99	101	103	101	104	106	105
PEACE	96	90	98	95	103	94	99
PROWLER 1	87	101	82	90	105	127	116
RAMBLER	105	101	106	104	92	111	101
SPREDOR 2	113	103	110	109	107	111	109
STAMPEDER	101	94	106	100	101	111	106
STARMASTER	88	100	105	98	107	106	106
SURE	93	91	94	93	105	119	112

CUTS	2	2	2		2	1	
CV(%)	19.5	11.9	19.6		11.4	16.4	
BEAVER (kg/ha)	1946	6477	4936	4453	4613	4423	4518

SUMMARY OF 1993 ALFALFA VARIETIES - AREA IRR

VARIETY	Yield as % of BEAVER							
	BOW ISLAND				BROOKS			
	1994	1995	1996	Mean	1994	1995	1996	Mean
5151	92	102	111	102	102	103	107	104
5246	105	111	119	112	99	101	102	100
5262	114	112	125	117	89	99	108	99
PICKSEED 8920 MF	104	107	110	107	87	95	102	95
ANCHOR	106	112	119	112	106	101	107	105
BEAVER	100	100	100	100	100	100	100	100
DART	107	110	112	110	96	95	100	97
ENCORE	108	103	115	109	89	94	106	96
LEGEND 2	107	105	114	109	86	90	97	91
MULTIKING 1	99	102	116	106	94	92	98	95
PROWLER 1	108	106	110	108	99	95	103	99
STARMASTER	100	106	116	108	93	94	101	96

CUTS	3	3	3		3	3	3	
CV(%)	6.8	5.2	7.0		11.0	8.7	8.8	
BEAVER (kg/ha)	17133	13368	12593	14365	10856	11569	13559	11995

SUMMARY OF 1994 MEADOW BROMEGRASS VARIETIES - AREA 1

VARIETY	Yield as % of FLEET		
	BROOKS		
	1995	1996	Mean
FLEET	100	100	100
Paddock	82	86	84
REGAR	90	99	95

CUTS	1	1	
CV(%)	19.3	9.3	
FLEET (kg/ha)	3364	1079	2222

SUMMARY OF 1993 MEADOW BROMEGRASS VARIETIES - AREA 5

VARIETY	Yield as % of FLEET							
	BEAVERLODGE				HIGH PRAIRIE			
	1994	1995	1996	Mean	1994	1995	1996	Mean
FLEET	100	100	100	100	100	100	100	100
Paddock	93	95	102	97	100	94	102	99
REGAR	104	91	97	97	97	102	102	100

CUTS	2	2	2		2	2	2	
CV(%)	6.1	16.5	6.3		2.2	4.8	3.9	
FLEET (kg/ha)	2155	5125	2793	3357	8311	4257	6010	6193

SUMMARY OF 1993 SMOOTH BROMEGRASS VARIETIES - AREA 5

VARIETY	Yield as % of CARLTON							
	BEAVERLODGE				HIGH PRAIRIE			
	1994	1995	1996	Mean	1994	1995	1996	Mean
BAYLOR	115	97	97	103	115	110	149	125
BRAVO	108	103	97	103	108	113	125	115
CARLTON	100	100	100	100	100	100	100	100
MAGNA	103	96	90	96	126	110	134	123
MANCHAR	87	86	103	92	113	116	111	114
RADISSON	107	100	117	108	118	113	119	116
REBOUND	97	96	95	96	110	125	112	116
SIGNAL	88	83	88	86	110	98	122	110

CUTS	2	2	2		2	2	2	
CV(%)	8.7	19.5	15.7		8.8	6.3	11.0	
CARLTON (kg/ha)	2101	4986	3237	3441	7570	3206	5439	5405

SUMMARY OF 1993 TIMOTHY VARIETIES - AREA 5

* Father seeded in 1994 *

VARIETY	Yield as % of CLIMAX						
	BEAVERLODGE				HIGH PRAIRIE		
	1994	1995	1996	Mean	1995	1996	Mean
ALMA	76	74	101	83	74	87	81
ARGUS	94	99	96	96	95	92	94
BASHO	99	107	102	103	97	88	92
BOTTNIA II	86	78	113	92	77	78	78
BOUNTY	103	106	97	102	101	93	97
CAROLA	109	112	92	104	94	97	95
CHAMP	108	102	99	103	96	97	96
CLIMAX	100	100	100	100	100	100	100
ENGMO	76	67	104	82	65	76	70
GLENMOR	103	101	85	96	.	.	.
HOKUSYU	.	.	.	.	100	86	93
ITASCA	93	105	104	101	96	92	94
NOSAPPU	.	.	.	.	97	87	92
RICHMOND	102	108	95	102	94	92	93
TIITI	79	93	99	90	93	85	89
TILLER	105	107	92	101	91	98	95
TIMFOR	90	110	97	99	98	95	97
WINMOR	107	107	88	101	103	92	97

CUTS	2	2	1		2	2	
CV(%)	10.7	15.4	8.0		13.1	10.8	
CLIMAX (kg/ha)	1661	3693	3639	2998	5353	9611	7482

SUMMARY OF 1994 TIMOTHY VARIETIES - AREA IRR

VARIETY	Yield as % of CLIMAX					
	BOW ISLAND			BROOKS		
	1995	1996	Mean	1995	1996	Mean
ALMA	62	81	71	82	90	86
BOTTNIA II	73	89	81	77	92	84
CLIMAX	100	100	100	100	100	100
HOKUSYU	82	93	87	86	99	92
NOSAPPU	100	93	96	88	96	92

CUTS	3	2		3	2	
CV(%)	7.7	6.1		9.7	4.7	
CLIMAX (kg/ha)	9181	8764	8972	9076	8698	8887

SUMMARY OF 1994 CRESTED WHEATGRASS VARIETIES - AREA 1

VARIETY	Yield as % of KIRK		
	BROOKS		
	1995	1996	Mean
FAIRWAY	75	64	69
KIRK	100	100	100
NORDAN	94	97	96
PARKWAY	83	88	85

CUTS	1	1	
CV(%)	13.5	9.8	
KIRK (kg/ha)	3456	1519	2488

SUMMARY OF 1994 PUBESCENT & INTERMEDIATE WHEATGRASS VARIETIES - AREA 1

VARIETY	Yield as % of GREENLEAF		
	BROOKS		
	1995	1996	Mean
CHIEF	70	98	84
CLARKE	69	101	85
GREENLEAF	100	100	100

CUTS	1	1	
CV(%)	15.5	10.9	
GREENLEAF (kg/ha)	2594	1568	2081

SUMMARY OF 1994 WILDRYE VARIETIES - AREA 1

VARIETY	Yield as % of SWIFT		
	BROOKS		
	1995	1996	Mean
ARTHUR	60	59	60
CABREE	85	70	77
EEJAY	37	90	63
JAMES	39	37	38
MAYAK	67	60	63
PRAIRIELAND	41	95	68
SWIFT	100	100	100
TETRACAN	64	58	61

CUTS	1	1	
CV(%)	21.3	24.2	
SWIFT (kg/ha)	2781	1855	2318

APPENDIX 1

CLIMATE DATA

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Seasonal Mean
Ballater CDA-Area 5													
(approx. High Prairie site)													
Mean Monthly Temperature (°C)	1996 -23.7	-9.5	-8.2	4.3	7.8	13.8	15.5	15.8	9.2	2.8	-	-	-
	1995 -13.7	-12.0	-7.0	3.9	12.1	15.9	15.7	12.5	12.5	4.5	-9.4	-16.3	1.7
	1994 -18.4	-21.3	-0.9	4.9	11.6	15.0	17.6	16.8	12.8	5.1	-6.5	-12.1	2.2
	1993 -16.1	-10.3	0.0	5.6	12.4	14.4	14.8	14.5	10.3	4.8	-3.9	-5.3	3.4
30 yr	-16.6	-11.8	-5.8	3.5	10.1	14.3	16.2	15.1	9.8	4.3	-7.0	-14.4	1.5
Mean Monthly Precipitation (mm)	1996 12.2	15.2	20.2	39.6	58.4	154.2	113.4	119.0	60.8	27.6	-	-	-
	1995 11.3	19.9	7.7	23.1	19.6	57.2	95.4	24.8	4.2	34.5	60.0	19.4	381.3
	1994 87.7	31.1	9.1	3.0	22.2	78.5	80.5	36.4	22.4	22.7	29.0	18.2	434.9
	1993 21.2	16.8	4.0	30.1	20.6	145.0	118.9	60.4	23.3	15.4	43.2	27.1	526.0
30 yr	31.2	23.3	22.7	24.7	40.4	70.3	66.3	62.7	45.9	26.5	27.9	29.6	471.4
Beaverlodge CDA-Area 5													
Mean Monthly Temperature (°C)	1996 -	-	-	-	6.3	12.3	-	14.8	7.8	-	-	-	-
	1995 -	-	-	3.3	11.1	14.4	15.1	11.8	12.4	4.1	-	-	-
	1994 -	-	-	4.9	10.3	13.9	16.5	15.9	11.9	4.0	-	-	-
	1993 -13.4	-7.4	0.1	4.9	12.2	13.5	13.8	14.0	10.7	6.0	-2.5	-3.9	4.0
30 yr	-13.6	-10.0	-5.1	3.2	9.5	13.3	15.3	14.4	9.6	4.5	-6.1	-11.9	1.9
Mean Monthly Precipitation (mm)	1996 -	-	-	-	69.6	43.5	-	74.2	72.9	-	-	-	-
	1995 -	-	-	20.5	32.8	85.2	141.7	28.1	8.7	20.7	-	-	-
	1994 -	-	-	7.4	43.8	125.3	73.2	102.8	43.8	25.5	-	-	-
	1993 13.6	5.3	9.7	50.4	15.3	134.0	79.4	81.0	23.2	28.7	12.0	19.4	472.0
30 yr	32.9	22.6	22.1	20.3	37.5	71.7	67.4	64.7	47.1	23.2	28.0	29.3	467.0
Bow Island													
Mean Monthly Temperature (°C)	1996 -16.0	-4.3	-3.7	8.3	10.3	17.6	19.8	20.4	12.3	6.5	-	-	-
	1995 -7.7	-4.0	0.3	5.2	12.5	16.8	18.9	17.5	13.8	6.3	-2.0	-10.7	5.6
	1994 -10.7	-13.5	4.5	8.1	13.9	16.6	20.4	19.4	16.3	7.6	-1.2	-3.6	6.5
	1993 -11.4	-8.9	3.0	7.3	14.1	15.5	16.0	16.7	12.1	7.5	-2.0	-1.7	5.7
30 yr	-10.6	-6.3	-0.9	6.6	12.4	17.6	19.7	19.6	12.9	7.6	-1.0	-7.9	5.8
Mean Monthly Precipitation (mm)	1996 7.4	1.5	9.1	7.9	29.1	30.8	27.7	10.7	76.3	6.1	-	-	-
	1995 4.1	2.3	5.2	2.6	56.4	50.9	42.9	57.6	21.6	34.1	10.6	13.0	321.3
	1994 17.0	7.9	1.3	2.8	44.2	90.2	16.8	1.0	21.6	57.9	12.2	0.3	273.2
	1993 0.8	5.6	26.1	41.9	27.9	104.4	135.9	67.3	40.3	17.6	13.5	2.6	483.8
30 yr	18.6	11.3	13.1	34.2	44.9	69.8	30.9	32.4	30.4	12.3	12.8	19.0	329.6

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Seasonal Mean
Brooks CDC-South													
Mean Monthly													
Temperature (°C)													
1996	-17.8	-7.5	-5.3	7.1	9.2	16.4	19.0	19.6	11.5	5.6	-	-	-
1995	-11.1	-4.8	-1.7	4.4	11.1	16.2	18.1	16.8	12.8	5.5	-5.0	-15.1	3.9
1994	-14.0	-15.9	3.2	6.9	12.7	15.8	20.0	18.7	15.2	8.5	-2.7	-6.2	5.2
1993	-14.3	-9.4	1.4	6.8	13.0	15.1	16.0	16.2	11.3	6.5	-3.6	-3.7	4.6
30 yr	-12.5	-8.2	-2.7	5.1	11.4	15.9	18.4	17.5	11.6	6.4	-3.7	-10.2	4.1
Mean Monthly													
Precipitation (mm)													
1996	3.1	2.8	6.8	20.1	29.7	39.8	19.2	38.0	65.3	6.2	-	-	-
1995	3.5	2.8	6.3	20.9	50.8	26.2	51.2	61.8	13.2	19.6	14.4	17.6	288.3
1994	28.3	21.8	12.8	1.0	68.0	67.6	26.8	6.0	19.8	27.9	8.4	0.3	288.7
1993	3.5	6.8	16.2	36.6	26.2	78.4	44.2	43.0	39.0	14.1	17.1	17.3	342.4
30 yr	18.4	11.6	17.0	27.2	39.0	65.5	38.1	36.3	38.8	16.0	15.0	18.0	340.9
Cold Lake A-Area 4													
(approx. Fort Kent site)													
Mean Monthly													
Temperature (°C)													
1996	-22.3	-12.4	-11.0	-	-	-	-	-	-	-	-	-	-
1995	-14.5	-12.0	-5.7	1.6	10.6	16.0	16.3	13.7	11.6	3.7	-10.1	-16.8	1.2
1994	-19.8	-21.1	-1.6	4.4	11.0	14.8	17.5	16.2	13.1	4.6	-6.5	-15.7	1.4
1993	-17.3	-10.8	-0.6	4.9	11.3	13.8	15.8	15.3	9.5	3.6	-7.1	-9.4	2.4
30 yr	-17.3	-13.3	-6.6	3.6	10.6	14.9	16.9	15.7	9.8	4.3	-6.8	-15.1	1.4
Mean Monthly													
Precipitation (mm)													
1996	6.2	23.2	11.4	-	-	-	-	-	-	-	-	-	-
1995	7.5	15.2	18.7	38.6	7.4	27.9	58.5	152.6	1.8	26.0	31.7	8.0	400.9
1994	28.9	13.8	8.5	2.4	55.0	90.2	80.7	33.3	45.7	23.0	22.6	19.4	414.4
1993	11.8	2.0	0.4	50.2	26.0	99.9	39.6	123.0	39.7	39.2	22.4	17.9	472.1
30 yr	19.4	13.7	17.0	21.4	40.1	67.8	85.0	68.7	41.7	15.8	19.1	21.9	431.7
Esther Capmon-Area 1													
(approx. Oyen site)													
Mean Monthly													
Temperature (°C)													
1996	-	-	-	4.8	7.7	14.9	17.6	18.8	9.5	3.4	-	-	-
1995	-13.1	-8.8	-3.1	2.2	10.5	16.1	17.4	15.8	12.1	4.1	-8.7	-	-
1994	-18.7	-19.2	-0.2	5.3	11.6	15.0	18.3	16.8	14.3	-	-4.1	-9.4	-
1993	-	-	-	-	-	-	16.1	16.8	12.5	7.2	-2.1	-2.4	-
30 yr	-15.2	-12.2	-5.3	4.2	11.0	15.6	18.0	17.0	10.8	4.7	-5.5	-12.5	2.6
Mean Monthly													
Precipitation (mm)													
1996	-	-	-	7.0	40.8	63.6	40.0	7.6	55.2	5.2	-	-	-
1995	0.0	0.0	0.0	6.6	28.2	51.8	35.2	70.0	2.6	2.0	-	-	-
1994	-	0.0	0.0	0.0	0.0	-	22.8	85.2	7.4	-	0.0	0.0	-
1993	-	-	-	-	-	-	94.6	15.4	2.0	1.8	0.0	0.0	-
30 yr	14.8	10.5	15.8	17.5	32.8	63.9	53.0	37.0	33.2	13.6	13.2	15.0	320.3

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Seasonal Mean
Gleichen													
(approx. Standard site)													
Mean Monthly													
Temperature (°C)													
1996	-	-	-	4.9	8.0	14.5	-	16.7	10.0	4.5	-	-	-
1995	-	-	-	3.2	10.0	15.0	16.9	14.3	12.1	3.9	-	-	-
1994	-12.9	-15.9	2.3	5.9	10.8	14.2	18.1	17.0	12.9	4.6	-	-	-
1993	-14.2	-9.8	-0.4	4.9	11.8	13.6	13.9	14.3	10.2	5.2	-4.5	-4.0	3.4
30 yr	-11.9	-8.2	-2.9	4.7	10.7	15.1	17.3	16.7	11.1	5.8	-3.7	-10.0	3.7
Mean Monthly													
Precipitation (mm)													
1996	-	-	-	14.0	25.5	41.0	-	39.0	54.0	10.0	-	-	-
1995	-	-	-	40.0	78.0	37.0	91.0	39.0	17.0	18.0	-	-	-
1994	17.0	3.0	4.5	0.0	96.0	30.5	33.0	36.0	7.0	36.5	-	-	-
1993	1.0	13.0	16.0	10.0	46.0	68.0	76.6	118.0	37.0	1.0	8.5	5.0	400.1
30 yr	15.8	10.9	15.9	26.1	47.8	62.6	51.3	37.7	41.9	12.8	16.0	15.9	354.7
Olds-Area 3													
Mean Monthly													
Temperature (°C)													
1996	-	-	-	-	-	12.7	-	-	7.8	-	-	-	-
1995	-	-	-	-	8.9	13.7	14.6	12.3	10.9	3.7	-	-	-
1994	-	-	-	5.3	10.3	12.9	16.4	15.3	12.3	3.8	-	-	-
1993	-12.6	-8.4	-1.5	4.3	11.0	12.3	12.9	13.2	9.4	5.1	-4.1	-3.5	3.2
30 yr	-11.2	-8.1	-4.1	3.4	9.3	13.5	15.6	14.9	9.9	5.1	-4.0	-9.4	2.9
Mean Monthly													
Precipitation (mm)													
1996	-	-	-	-	-	73.3	-	-	95.5	-	-	-	-
1995	-	-	-	-	63.8	136.7	133.5	117.7	28.6	13.4	-	-	-
1994	-	-	-	6.2	71.2	98.4	60.4	89.0	75.8	17.7	-	-	-
1993	7.7	16.0	33.7	16.8	41.1	115.9	81.1	69.8	40.4	21.5	26.9	11.4	482.3
30 yr	21.6	14.8	20.9	26.9	55.0	85.9	85.7	59.5	53.8	18.5	19.4	22.1	484.1
Vegreville-Area 3													
Mean Monthly													
Temperature (°C)													
1996	-21.2	-12.1	-10.1	3.3	6.8	12.7	15.6	15.5	8.3	2.3	-	-	-
1995	-15.0	-12.9	-6.5	2.0	9.2	14.4	15.2	12.6	10.4	2.9	-10.3	-16.9	0.4
1994	-19.0	-20.8	-3.5	4.0	10.6	13.5	16.3	15.4	12.5	3.6	-7.5	-14.5	0.9
30 yr	-16.4	-12.8	-7.2	3.4	10.4	14.4	16.2	15.2	9.8	4.1	-6.6	-14.3	1.4
Mean Monthly													
Precipitation (mm)													
1996	13.7	7.7	6.8	25.1	37.2	51.4	71.0	62.0	78.2	9.7	-	-	-
1995	6.3	12.5	12.0	10.0	40.2	25.4	92.2	116.8	1.4	3.6	16.4	11.8	348.6
1994	41.6	18.9	4.0	2.2	52.0	100.3	71.9	111.2	32.0	34.4	8.5	4.8	480.4
30 yr	16.6	12.3	14.1	15.9	38.3	72.9	83.2	61.3	41.1	14.8	14.5	17.6	402.5

Prepared by Peter Dziukowski of the Conservation and Development Branch, Alberta Agriculture. This information is based on unverified preliminary telegraphic data obtained from the Atmospheric Environment Service, Environment Canada.

