## Curlew ICST - 1994 Forage Production Summary Loren St. John, Assistant Manager

The Aberdeen Plant Materials Center planted a new Inter-Center Strain Trial (ICST) on the Curlew National Grasslands southwest of Pocatello, Idaho in November, 1992. The purpose of the ICST is to evaluate a number of grasses for livestock and wildlife forage on sagebrush-grass range sites in southeast Idaho. This planting is in cooperation with the U.S. Forest Service which manages the Curlew National Grasslands, Oneida Soil Conservation District, and the Bureau of Land Management. The test site is located on a loamy range site in a 12-16 inch precipitation zone. The soil is a brown silt loam, very deep and well-drained with moderate permeability.

The ICST includes replicated plots of 13 intermediate and 7 thickspike wheatgrass accessions, and 6 alfalfa varieties. A display nursery including 91 accessions of grasses, forbs, and shrubs was also planted.

Precipitation was well below normal during 1994, estimated to be approximately 6 inches. On July, 11 we evaluated the replicated plots in the ICST for plant density, vigor, plant height, and forage production. Here is a summary of the forage production data:

Accession	Source	Forage Production
		(pounds per acre)
Intermediate Wheatgrass (Elytrigia intermedia)		
Manska	ARS-North Dakota	629.3 a
Reliant	ARS-North Dakota	629.3 a
Rush	Aberdeen PMC	592.3 a
Slate	ARS-Nebraska	583.0 a
Oahe	AES South Dakota	342.4 ab
Luna	Los Lunas PMC	323.9 ab
Greenleaf	Canada	277.7 b
Mandan	ARS-North Dakota	240.7 b
AI Hybrid	ARS-Utah	175.8 b
Greenar	Pullman PMC	138.8 b
Topar	Aberdeen PMC	101.8 b
Tegmar	Aberdeen PMC	83.8 b
Amur	Los Lunas PMC	0.0
<b>Thickspike Wheatgrass</b> (Elymus lanceolatus)		
9021076	Aberdeen PMC	185.1
PI-236663	Pullman PMC	157.3
Critana	Bridger PMC	157.3
SL Hybrid	ARS-Utah	148.1
Schwendimar	Pullman PMC	129.6
PI-236664	Pullman PMC	101.8
Sodar	Aberdeen PMC	92.6

One-way analysis of variance and means separation tests were performed on the forage production data from the intermediate wheatgrass and thickspike wheatgrass accessions. Forage production data followed by the same letter are not significantly different. Within the intermediate wheatgrass accessions, there was significant differences in forage production but none within the thickspike accessions. Because the alfalfa accessions have performed rather poorly, their data is not presented.

We plan to evaluate the ICST again this coming summer. Hopefully, with all the precipitation we have been getting, forage production will be greatly improved over last year.

For more details on the ICST, please contact me. A progress report is available which describes the site and our activities which you may also obtain from me or Dan Ogle, Plant Materials Specialist.

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