

NATIONAL TURFGRASS EVALUATION PROGRAM

The National Turfgrass Evaluation Program (NTEP) is designed to develop and coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Test results can be used by national companies and plant breeders to determine the broad picture of the adaptation of a cultivar. Results can also be used to determine if a cultivar is well adapted to a local area or level of turf maintenance.

Briefly, the NTEP is a self-supporting, non-profit program, sponsored by the Beltsville Agricultural Research Center and the National Turfgrass Federation, Inc. Program policy is made by a policy committee consisting of one member from each of the four (4) Regional Turfgrass Research Committees in the United States, one member from the Lawn Seed Division of the American Seed Trade Association, one member from the American Sod Producers Association, a national director, and an executive coordinator. The program will not make variety recommendations. However, the data from tests can be used by extension specialists and others for making recommendations.

The policy committee is responsible for determining program policy including, (1) requirements for submission of entries, (2) scheduling tests, (3) evaluation methods, (4) selecting standard or control test entries, (5) setting entry fees, (6) coordinating tests in their respective regions, (7) establishing guidelines for publication and data distribution and (8) scheduling committee meetings. The national director is responsible for the overall coordination and operation of the NTEP, including (1) soliciting entries and distribution of test seed sets to evaluators, (2) data summarization and distribution, and, (3) management of test materials, facilities, and finances.

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1987 National Tall Fescue Test - 1991 data

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LOCATIONS SUBMITTING DATA FOR 1991

<u>State</u>	<u>Location</u>	<u>Code</u>
Arkansas	Fayetteville	AR1
Arizona	Tucson	AZ1
California	Santa Clara	CA1
California	Santa Ana	CA2
California	Riverside	CA3
Georgia	Griffin	GA1
Illinois	Carbondale	IL2
Indiana	West Lafayette (high maintenance)	IN1
Indiana	West Lafayette (low maintenance)	IN2
Iowa	Ames	IA1
Kansas	Wichita	KS2
Maryland	Beltsville (high maintenance)	UB1
Maryland	Beltsville (low maintenance)	UB2
Maryland	Silver Spring	MD1
Michigan	East Lansing	MI1
Missouri	Columbia	MO1
Missouri	St. Louis	MO3
New Jersey	North Brunswick	NJ1
New Jersey	Adelphia	NJ2
Ohio	Marysville	OH2
Oklahoma	Stillwater	OK1
Oregon	Hubbard	OR1
Rhode Island	Kingston	RI1
Texas	Dallas (high mowing)	TX1
Texas	Dallas (low mowing)	TX2
Virginia	Blacksburg	VA1
Virginia	Richmond	VA3
Virginia	Virginia Beach	VA4
Virginia	Norton	VA6

1987 NATIONAL TALL FESCUE TEST

Entries and Sponsors

Entry No.	Name	Sponsor	Entry No.	Name	Sponsor
1	Adventure	Davenport Seed Company	36	PST-5AP	Turf-Seed, Inc.
2	Barnone (BAR Fa 7851)	Barenbrug Holland	37	Amigo (PST-5HF)	Medalist America
3	Trident	Seed Research of Oregon	38	Jaguar	Zajac Performance Seeds
4	Titan	Seed Research of Oregon	39	Tradition (PST-DBC)	Pennington Seed, Inc.
5	Shortstop (Pick DDF)	Pickseed West, Inc.	40	Olympic	Turf-Seed, Inc.
6	Cochise (Pick 127)	Ampac Seed Co.	41	Jaguar II	Zajac Performance Seeds
7	Guardian (Pick 84SPN)	Roberts Seed Co.	42	Monarch	Turf-Seed, Inc.
8	Emperor (Pick SLD)	Zajac Performance Seeds	43	Apache	Turf-Seed, Inc.
9	PE-7	Reed Funk - Rutgers	44	Arriba (PST-5DM)	Medalist America
10	Shenandoah (PE-7E)	Willamette Seed Co.	45	Avanti (Pick DM)	Pickseed West, Inc.
11	Hubbard 87	Hubbard Seed & Supply	46	Vegas (Normarc 99)	Normarc Seed Company
12	Aquara (Syn Ga)	O. M. Scott & Sons	47	Pacer	International Seeds, Inc.
13	Brahma (Legend)	Agway	48	Carefree	International Seeds, Inc.
14	Taurus	Turf Merchants, Inc.	49	Richmond	Jonathan Green, Inc.
15	Aztec	Turf Merchants, Inc.	50	Tip	NPI Seed, Inc.
16	Sundance	Seaboard Seed Co.	51	Ky-31	-
17	Fatima	Advanta Seeds West	52	Bel 86-1	Jack Murray - USDA, ARS
18	Austin (Normarc 25)	Normarc Seed Co.	53	Bel 86-2	Jack Murray - USDA, ARS
19	Phoenix (Normarc 77)	Normarc Seed Co.	54	PST-5EN	Pure-Seed Testing, Inc.
20	Anthem (KWS-DUR)	KWS-Einbeck	55	Winchester (PST-5F2)	E. F. Burlingham
21	Twilight (KWS-BG-6)	Turf Merchants	56	Finelawn 5GL	Finelawn Research Corp.
22	Willamette	Willamette Seed Co.	57	Finelawn I	Finelawn Research Corp.
23	Chieftain	Roberts Seed Co.	58	Rebel	Loft's Seed, Inc.
24	Maverick II (Pick GH6)	Pickseed West, Inc.	59	Rebel II	Loft's Seed, Inc.
25	Thoroughbred	Pickseed West, Inc.	60	Tribute	Loft's Seed, Inc.
26	Crossfire (Pick TF9)	Pickseed West, Inc.	61	Arid	Jacklin Seed Co.
27	Olympic II (PST-50L)	Turf-Seed, Inc.	62	Wrangler	Jacklin Seed/LESCO, Inc.
28	Murietta (PST-5D7)	Pure-Seed Testing, Inc.	63	Mesa	Jonathan Green, Inc.
29	Cimmaron	LESCO, Inc.	64	JB-2	Jacklin Seed Co.
30	Bonanza	Proprietary Seeds	65	Falcon	E. F. Burlingham
31	PST-5AG	Pure-Seed Testing, Inc.			
32	Silverado (PST-5BL)	Pure-Seed Testing, Inc.			
33	Safari (PST-5MW)	Pure-Seed Testing, Inc.			
34	Trailblazer	LESCO, Inc.			
35	Eldorado (PST-5D1)	Pure-Seed Testing, Inc.			

TABLE A.

1991 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN
THE 1987 NATIONAL TALL FESCUE TEST

LOCATION	SOIL TEXTURE	SOIL PH	SOIL PHOSPHOROUS (LBS/ACRE)	SOIL POTASSIUM (LBS/ACRE)	NITROGEN (LBS/1000 SQ FT)	SUN OR SHADE	MOWING HEIGHT (IN)	IRRIGATION PRACTICED
AR1	SILT LOAM AND SILT	6.1-6.5	61-150	376-500	3.1-4.0	FULL SUN	2.6-3.0	TO PREVENT STRESS
AZ1	SANDY LOAM	7.6-8.5	61-150	376-500	2.1-3.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
CA1	LOAM	6.1-6.5	61-150	0-150	3.1-4.0	FULL SUN	1.6-2.0	TO PREVENT STRESS
CA2	-	-	-	-	-	-	-	-
CA3	SANDY LOAM	6.6-7.0	-	-	5.1-6.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
GA1	SANDY CLAY LOAM	5.6-6.0	61-150	151-240	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
IA1	SANDY CLAY LOAM	7.1-7.5	0-60	241-375	2.1-3.0	FULL SUN	2.1-2.5	NO IRRIGATION
IL2	SILTY CLAY AND CLAY	6.1-6.5	61-150	151-240	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
IN1	SILT LOAM AND SILT	6.6-7.0	61-150	376-500	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
IN2	SILT LOAM AND SILT	6.6-7.0	61-150	241-375	0.0-1.0	FULL SUN	3.6-4.0	NO IRRIGATION
KS2	-	6.6-7.0	61-150	241-375	4.1-5.0	FULL SUN	2.6-3.0	TO PREVENT DORMANCY
MD1	SANDY LOAM	6.6-7.0	451+	0-150	0.0-1.0	FULL SUN	2.6-3.0	TO PREVENT DORMANCY
MI1	SANDY LOAM	7.6-8.5	0-60	0-150	1.1-2.0	FULL SUN	1.6-2.0	TO PREVENT STRESS
MO1	SILT LOAM AND SILT	6.1-6.5	61-150	0-150	2.1-3.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
MO3	SILTY CLAY LOAM	7.1-7.5	0-60	151-240	3.1-4.0	FULL SUN	2.6-3.0	ONLY DURING SEVERE STRESS
NJ1	LOAM	6.1-6.5	61-150	151-240	0.0-1.0	FULL SUN	1.6-2.0	NO IRRIGATION
NJ2	SANDY LOAM	5.6-6.0	151-270	241-375	4.1-5.0	FULL SUN	1.6-2.0	TO PREVENT STRESS
OH2	SILTY CLAY LOAM	-	-	-	4.1-5.0	FULL SUN	1.6-2.0	ONLY DURING SEVERE STRESS
OK1	-	-	-	-	-	FULL SUN	2.1-2.5	TO PREVENT STRESS
OR1	SILT LOAM AND SILT	5.6-6.0	151-270	241-375	4.1-5.0	FULL SUN	1.1-1.5	TO PREVENT DORMANCY
RI1	SILT LOAM AND SILT	6.6-7.0	271-450	151-240	3.1-4.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
TX1	SILTY CLAY AND CLAY	7.6-8.5	451+	501+	1.1-2.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
TX2	SILTY CLAY AND CLAY	7.6-8.5	451+	501+	1.1-2.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
UB1	SANDY LOAM	6.1-6.5	271-450	241-375	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
UB2	SANDY LOAM	6.1-6.5	271-450	151-240	0.0-1.0	FULL SUN	2.6-3.0	NO IRRIGATION
VA1	SILT LOAM AND SILT	6.1-6.5	61-150	241-375	3.1-4.0	FULL SUN	2.1-2.5	ONLY DURING SEVERE STRESS
VA3	SANDY LOAM	6.1-6.5	151-270	241-375	3.1-4.0	FULL SUN	2.1-2.5	ONLY DURING SEVERE STRESS
VA4	SANDY LOAM	6.1-6.5	61-150	241-375	3.1-4.0	LIGHT SHADE	2.1-2.5	TO PREVENT STRESS
VA6	SANDY CLAY	6.6-7.0	271-450	241-375	3.1-4.0	FULL SUN	2.1-2.5	NO IRRIGATION

TABLE B.

LOCATIONS AND DATA COLLECTED IN 1991

LOCATION	JANUARY QUALITY RATING	FEBRUARY QUALITY RATING	MARCH QUALITY RATING	APRIL QUALITY RATING	MAY QUALITY RATING	JUNE QUALITY RATING	JULY QUALITY RATING	AUGUST QUALITY RATING	SEPTEMBER QUALITY RATING	OCTOBER QUALITY RATING	NOVEMBER QUALITY RATING	DECEMBER QUALITY RATING
AR1		X	X	X	X	X	X	X	X	X	X	X
AZ1		X	X				X				X	
CA1	X		X	X	X	X		X		X		
CA2	X	X	X	X	X	X	X	X	X	X	X	X
CA3	X	X	X	X	X	X	X	X	X	X	X	X
GA1					X		X		X			
IA1					X	X	X	X	X	X		
IL2				X	X	X	X	X	X			
IN1				X	X	X	X	X				
IN2				X	X	X	X	X				
KS2								X	X			
MD1				X	X		X					
MI1					X	X	X		X			
MO1						X						
MO3				X	X	X	X	X	X	X	X	
NJ1				X	X	X	X	X	X	X	X	
NJ2				X			X					X
OH2					X							
OK1				X	X	X	X	X	X		X	X
OR1	X	X	X	X	X	X	X	X	X			
RI1				X	X	X	X	X	X	X	X	
TX1		X	X		X	X		X	X	X	X	
TX2		X	X		X	X		X	X	X	X	
UB1				X	X	X	X	X	X	X	X	
UB2				X	X	X	X	X	X	X	X	
VA1				X	X	X	X					
VA3				X	X		X	X		X		X
VA4			X	X	X	X	X	X	X	X	X	
VA6				X		X		X		X	X	

TABLE B. (CONTINUED)

LOCATIONS AND DATA COLLECTED IN 1991

LOCATION	GENETIC COLOR RATING	SPRING GREENUP RATING	LEAF TEXTURE RATING	SPRING DENSITY	SUMMER DENSITY	FALL DENSITY	PERCENT COVER SUMMER	BROWN PATCH	VERTICAL GROWTH RATING
AR1	X		X	X	X	X			
AZ1	X			X					
CA1				X	X	X			
CA2									
CA3									
GA1									
IA1									
IL2								X	
IN1									
IN2									
KS2									
MD1									
MI1									
MO1							X		
MO3	X			X	X	X			
NJ1									
NJ2									
OH2	X		X						X
OK1	X	X		X		X			
OR1									
RI1									
TX1									
TX2									
UB1									
UB2									
VA1									
VA3		X					X		
VA4									
VA6								X	

TABLE 1.

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT TWENTY-NINE LOCATIONS IN THE UNITED STATES
1991 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 1/														
	ARI	AZ1	CA1	CA2	CA3	GA1	IA1	IL2	IN1	IN2	KS2	MD1	MI1	MO1	MO3
* SHENANDOAH (PE-7E)	6.3	7.0	6.8	6.3	6.9	6.8	7.3	5.8	7.1	4.5	7.2	6.7	5.6	3.7	6.0
* HUBBARD 87	5.4	6.9	6.6	6.3	7.0	6.6	6.9	5.1	7.6	4.0	7.3	6.8	6.1	4.0	5.9
* VEGAS (NORMARC 99)	6.4	6.8	6.3	6.4	7.0	5.9	6.9	5.2	7.0	4.7	7.3	6.4	4.5	4.0	6.5
* GUARDIAN (PICK 845PN)	6.2	6.9	6.8	6.3	7.0	6.0	6.6	4.4	6.8	4.6	6.7	6.8	5.8	3.0	5.9
* CROSSFIRE (PICK TF9)	6.7	6.8	6.8	6.4	7.0	6.9	6.1	4.9	6.9	4.2	6.5	6.8	6.2	2.7	6.1
* COCHISE (PICK 127)	5.8	6.8	6.0	6.3	6.9	6.6	6.8	4.7	6.9	4.5	5.5	6.6	6.2	4.3	5.9
* AMIGO (PST-5HF)	5.6	6.9	6.6	6.4	6.8	6.3	6.7	4.4	6.8	4.4	7.3	6.6	6.1	3.7	5.7
* SHORTSTOP (PICK DDF)	6.2	6.8	6.4	6.3	7.0	5.4	7.1	4.8	6.7	4.7	6.3	6.4	6.5	4.3	5.7
* ANTHEM (KWS-DUR)	5.5	6.9	6.6	6.4	7.0	6.1	6.9	4.5	6.9	4.3	6.3	6.2	5.8	4.0	6.8
BEL 86-2	5.4	7.1	6.8	6.3	7.0	6.6	7.3	5.2	7.1	4.1	6.3	6.8	5.4	3.7	5.8
* TRIBUTE	5.3	6.8	6.3	6.3	7.0	6.7	7.3	5.4	6.9	4.6	7.2	6.6	5.6	3.7	5.1
* SAFARI (PST-5MW)	4.5	7.0	6.7	6.3	6.9	6.2	6.3	4.6	6.9	4.2	6.7	6.6	6.1	3.3	6.0
* MONARCH	5.7	7.0	6.9	6.4	7.0	6.1	5.7	5.2	6.9	4.3	7.0	6.7	5.4	3.3	6.0
PE-7	5.2	6.9	6.6	6.3	6.9	6.4	6.6	4.1	6.9	4.3	7.2	6.7	6.7	3.0	5.9
* PHOENIX (NORMARC 77)	4.9	6.8	6.5	6.3	7.0	6.3	6.9	5.0	6.6	4.1	6.8	6.6	6.3	4.0	5.6
* AUSTIN (NORMARC 25)	5.1	6.8	6.3	6.3	6.9	6.2	6.2	.	6.8	.	5.8	6.6	5.5	4.0	5.2
* OLYMPIC II (PST-5OL)	6.0	6.8	6.6	6.3	6.9	5.8	6.2	4.7	7.0	4.1	7.2	6.6	6.2	3.3	5.5
* ELDORADO (PST-5D1)	5.2	6.7	6.5	6.3	6.9	5.9	6.8	4.7	6.7	4.1	6.0	6.4	5.6	3.3	6.5
* TWILIGHT (KWS-BG-6)	6.1	6.9	6.4	6.3	6.9	5.4	7.4	.	6.5	4.3	6.2	6.4	5.8	3.7	7.3
* WINCHESTER (PST-5F2)	5.1	6.9	6.4	6.4	6.9	5.9	6.8	5.3	6.5	4.3	6.8	6.4	5.8	4.0	5.7
* AZTEC	5.4	7.0	6.7	6.4	6.9	5.3	5.9	5.0	7.1	3.9	5.5	6.4	5.3	3.0	6.3
* AVANTI (PICK DM)	5.0	7.0	7.0	6.4	7.0	6.2	6.7	4.7	6.9	4.1	6.2	6.8	4.9	3.3	5.3
* SILVERADO (PST-5BL)	5.2	7.1	7.0	6.3	7.0	5.6	6.2	4.2	6.7	4.3	6.5	6.3	5.6	3.3	6.2
* MAVERICK II (PICK GH6)	5.0	7.1	6.6	6.3	6.9	6.1	5.9	5.0	6.8	3.3	6.2	6.4	6.0	3.0	5.7
* CHIEFTAIN	5.0	6.7	6.3	6.4	6.9	5.8	6.7	4.5	6.7	4.0	6.0	6.7	6.2	3.3	5.5
PST-5AG	5.6	6.8	6.3	6.3	7.0	5.0	6.5	4.7	6.7	4.5	6.7	6.6	6.2	3.0	5.7
* REBEL II	5.1	7.3	6.6	6.3	6.9	6.1	6.3	5.0	6.9	4.3	6.5	6.6	6.1	3.7	4.9
* ARRIBA (PST-5DM)	5.3	7.1	7.0	6.3	7.0	5.8	6.4	5.1	7.0	4.3	4.7	6.4	5.3	3.0	5.3
* BONANZA	5.1	6.6	6.4	6.4	6.9	6.1	6.5	4.2	6.7	4.5	6.3	6.4	6.2	3.0	5.7
* SUNDANCE	5.0	6.8	5.8	6.4	6.9	5.4	7.2	5.0	6.7	4.4	6.7	6.3	6.1	3.3	5.6
* MESA	5.1	7.0	6.4	6.3	6.9	6.9	6.8	4.7	6.7	4.5	6.5	6.4	.	3.3	5.6
* THOROUGHBRED	5.4	6.7	6.4	6.3	7.0	5.9	6.6	4.3	6.7	4.2	6.8	6.4	6.3	3.0	5.5
* WRANGLER	5.6	6.6	7.0	6.3	6.9	5.2	5.4	5.5	6.9	4.0	6.2	6.3	.	3.3	5.3
* TRADITION (PST-DBC)	6.0	6.7	6.1	6.3	6.9	6.6	6.6	4.3	6.7	4.5	7.0	6.4	6.0	3.3	5.3
* TRAILBLAZER	4.7	6.8	6.6	6.3	6.9	4.7	5.4	4.3	6.6	4.1	6.7	6.4	5.8	4.0	6.0
PST-5AP	5.5	6.8	5.8	6.3	6.9	5.7	6.9	5.6	6.7	4.4	6.7	6.4	5.7	3.7	5.4
* JAGUAR II	5.1	6.4	6.2	6.3	7.0	6.1	6.3	4.6	6.9	3.7	6.2	6.6	6.3	3.3	5.3
* EMPEROR (PICK SLD)	5.0	6.5	6.3	6.3	6.9	5.9	6.3	5.5	6.7	4.1	5.7	6.6	6.4	3.0	6.0
* BRAHMA (LEGEND)	5.4	6.5	6.8	6.3	6.9	4.9	6.2	4.8	6.8	4.2	6.8	6.3	6.5	3.3	5.7
PST-5EN	5.5	6.5	.	6.3	6.9	6.2	6.6	4.2	6.7	4.5	5.8	6.4	6.1	3.3	5.4
* BARNONE (BAR FA 7851)	5.2	6.9	6.4	6.3	7.0	6.4	6.7	.	6.4	4.5	6.5	6.4	5.5	3.0	5.3
* MURIETTA (PST-5D7)	5.0	6.7	6.9	6.4	6.9	5.6	6.6	4.6	6.9	3.9	6.2	6.3	6.3	3.3	5.9
* APACHE	5.5	6.8	5.9	6.2	6.9	6.0	6.9	5.4	6.7	4.0	6.3	6.6	5.8	3.0	5.7
* TAURUS	5.4	7.0	6.3	6.4	6.9	5.4	6.4	4.7	6.6	4.5	6.3	6.3	5.9	3.3	5.3
* TITAN	5.0	6.6	5.9	6.3	6.9	6.6	6.3	4.8	6.5	4.1	6.3	6.4	6.3	4.0	4.5

TABLE 1. (CONTINUED)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT TWENTY-NINE LOCATIONS IN THE UNITED STATES
1991 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF														
	ARI	AZ1	CA1	CA2	CA3	GA1	IA1	IL2	IN1	IN2	KS2	MD1	MI1	MO1	MO3
* CIMMARON	4.9	6.9	6.0	6.3	6.9	5.4	6.6	4.8	6.3	3.8	7.3	6.4	6.5	3.3	5.3
* ARID	5.4	6.8	6.3	6.4	7.0	6.2	6.4	5.4	6.6	4.4	6.2	6.4	6.3	3.3	4.5
* OLYMPIC	5.0	6.7	5.8	6.3	6.9	5.2	5.7	4.8	6.7	4.0	7.0	6.6	6.4	3.3	4.9
* FINELAWN 5GL	5.0	6.6	6.0	6.3	6.9	5.9	6.2	4.4	6.8	4.5	6.0	6.3	5.8	3.3	4.4
* CAREFREE	4.8	7.0	6.1	6.2	6.9	4.8	5.9	5.2	6.7	4.2	6.3	6.4	6.5	3.3	4.6
JB-2	5.1	6.9	6.6	6.3	6.9	5.3	5.4	5.2	6.7	4.3	5.3	6.3	.	3.7	4.6
* JAGUAR	4.4	6.9	5.8	6.3	6.9	6.4	5.8	4.7	6.9	4.0	5.3	6.6	5.4	4.0	4.5
BEL 86-1	4.6	6.9	6.4	6.3	6.9	5.2	6.3	4.5	6.2	4.4	6.2	6.4	5.4	3.3	5.0
* TRIDENT	4.7	6.7	5.8	6.2	7.0	5.6	6.8	5.2	6.5	3.7	5.8	6.3	6.1	3.7	4.9
* REBEL	5.0	6.6	6.3	6.3	6.9	4.8	5.8	4.3	6.6	4.0	6.5	6.3	5.9	3.0	4.9
* ADVENTURE	4.9	6.7	6.2	6.3	6.9	5.7	5.5	5.1	6.7	4.1	6.3	6.3	5.3	3.0	4.3
* FALCON	4.2	6.5	5.9	6.3	6.8	6.1	5.9	4.9	6.5	4.0	5.5	6.3	.	3.0	4.8
* WILLAMETTE	5.1	6.6	5.9	6.2	6.9	5.1	5.4	4.5	6.6	3.9	6.7	6.2	6.5	3.3	4.7
* FATIMA	5.1	6.8	5.4	6.2	6.8	5.4	5.8	4.8	6.3	4.1	5.7	6.1	6.2	4.0	4.3
* AQUARA (SYN GA)	4.9	6.5	5.1	6.3	6.9	5.4	5.8	4.6	6.3	3.9	6.0	6.2	5.9	3.3	4.6
* PACER	4.9	6.3	5.5	6.3	6.9	6.1	5.9	4.9	6.4	4.1	5.8	6.2	5.6	2.7	4.9
* FINELAWN I	5.0	6.1	5.7	6.1	6.8	5.9	5.7	4.0	6.2	4.1	5.5	6.2	6.3	3.3	4.4
* RICHMOND	4.5	6.3	5.1	6.1	6.9	5.3	5.7	4.9	6.0	4.3	6.0	6.0	5.8	3.0	4.3
* TIP	5.2	6.4	5.8	6.3	6.9	4.4	5.4	4.7	5.9	3.8	5.7	6.1	5.8	3.7	3.8
* KY-31	3.8	6.0	4.8	5.4	5.5	4.1	5.3	4.9	5.3	3.8	4.7	5.3	5.9	3.3	2.9
LSD VALUE	1.1	0.5	0.5	0.2	0.1	1.0	1.1	1.2	0.4	0.6	1.5	0.3	0.5	0.9	1.0

* COMMERCIALLY AVAILABLE IN THE UNITED STATES IN 1992

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 1. (CONTINUED)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT TWENTY-NINE LOCATIONS IN THE UNITED STATES
1991 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF														MEAN
	NJ1	NJ2	OH2	OK1	OR1	RI1	TX1	TX2	UB1	UB2	VA1	VA3	VA4	VA6	
SHENANDOAH (PE-7E)	6.0	7.0	8.0	5.7	6.4	4.8	5.7	5.8	8.0	6.8	6.6	6.2	6.7	5.7	6.3
HUBBARD 87	5.7	7.3	8.0	5.9	6.6	5.1	5.6	5.7	8.0	6.7	6.4	5.3	6.7	5.3	6.2
VEGAS (NORMARC 99)	6.8	6.4	7.7	5.8	6.4	4.7	5.5	5.2	7.8	6.8	6.1	5.2	6.3	5.0	6.1
GUARDIAN (PICK 845FN)	6.4	7.3	7.7	5.9	6.4	4.5	5.2	6.2	8.1	6.6	6.0	5.1	6.4	5.1	6.1
CROSSFIRE (PICK TF9)	6.4	6.8	7.3	6.0	6.5	4.9	5.5	5.5	8.0	6.5	6.1	5.2	6.3	4.6	6.1
COCHISE (PICK 127)	6.4	7.1	8.0	5.4	5.8	4.8	5.5	5.5	8.0	6.9	5.8	5.6	6.2	4.9	6.1
AMIGO (PST-5HF)	5.5	5.8	8.0	5.7	7.3	4.6	5.4	5.9	7.8	6.6	6.1	5.2	6.4	4.7	6.0
SHORTSTOP (PICK DDF)	5.9	5.8	7.3	5.9	6.2	4.4	5.5	5.1	7.9	6.8	6.2	5.8	6.4	4.9	6.0
ANTHEM (KWS-DUR)	6.1	7.0	7.3	5.4	6.1	4.5	5.4	5.5	8.0	6.7	5.9	5.8	6.4	4.5	6.0
BEL 86-2	5.5	5.3	7.7	5.8	5.5	4.9	5.8	5.3	7.9	6.8	6.3	5.2	6.8	5.1	6.0
TRIBUTE	5.6	6.0	7.3	5.9	5.7	4.9	5.5	5.7	7.8	6.6	6.0	5.5	6.3	5.1	6.0
SAFARI (PST-5MW)	6.2	6.8	7.3	6.0	6.4	5.1	5.8	6.3	7.8	6.6	5.9	5.2	6.0	4.9	6.0
MONARCH	6.7	6.1	7.3	5.4	6.3	5.0	4.8	5.5	8.0	6.7	6.0	5.7	6.3	4.8	6.0
PE-7	5.4	6.4	7.7	5.8	6.0	4.4	5.5	5.3	8.0	7.1	6.3	5.7	5.9	4.9	6.0
PHOENIX (NORMARC 77)	5.2	5.8	7.7	5.9	5.9	5.0	5.6	5.8	7.5	6.5	6.3	5.5	6.0	4.9	6.0
AUSTIN (NORMARC 25)	5.5	6.2	7.3	5.7	5.3	4.9	5.8	6.0	8.0	6.2	6.2	4.7	5.9	5.4	6.0
OLYMPIC II (PST-5OL)	5.4	5.2	7.7	5.7	5.9	4.8	5.6	5.6	7.5	6.4	5.8	5.4	6.3	5.9	5.9
ELDORADO (PST-5D1)	6.2	7.0	7.3	5.8	6.0	4.4	5.3	5.5	7.9	6.7	5.8	5.1	5.8	5.6	5.9
TWILIGHT (KWS-BG-6)	6.1	4.9	7.7	5.8	6.2	4.4	4.8	5.2	7.6	5.9	5.8	5.7	5.8	4.5	5.9
WINCHESTER (PST-5F2)	5.3	6.7	7.3	5.5	5.0	4.8	5.2	5.4	7.9	6.3	6.0	4.7	6.0	5.5	5.9
AZTEC	6.5	5.9	7.7	5.3	5.9	5.2	5.8	5.0	8.0	6.5	6.1	5.4	6.5	4.9	5.9
AVANTI (PICK DM)	6.4	6.2	7.0	5.5	6.1	5.0	5.7	4.8	7.8	6.8	5.9	4.7	6.1	5.1	5.9
SILVERADO (PST-5BL)	6.2	5.9	7.3	6.0	7.0	5.0	5.2	4.8	7.9	6.5	5.8	4.8	5.9	4.3	5.9
MAVERICK II (PICK GH6)	5.3	6.6	7.0	5.8	5.8	4.5	5.5	5.2	7.7	6.5	5.5	5.1	6.3	5.9	5.8
CHIEFTAIN	5.4	5.8	7.7	5.4	6.1	4.8	5.5	5.2	7.5	6.2	6.0	5.4	6.1	5.4	5.8
PST-5AG	5.1	4.1	7.7	5.8	6.6	4.4	5.8	4.9	7.7	6.8	6.3	5.4	6.5	4.3	5.8
REBEL II	5.2	5.0	7.0	5.7	5.8	5.2	5.5	5.1	7.4	6.4	6.1	4.6	6.2	5.1	5.8
ARRIBA (PST-5DM)	5.1	6.7	7.7	5.7	5.7	4.8	5.3	5.3	7.7	6.2	6.2	5.0	6.3	4.8	5.8
BONANZA	5.4	5.1	7.7	5.6	5.7	4.5	5.5	5.1	8.0	6.4	5.7	5.2	6.3	5.1	5.8
SUNDANCE	5.5	5.4	7.0	5.7	5.3	4.2	5.5	5.5	7.7	6.1	5.7	5.4	6.0	5.4	5.8
MESA	4.9	5.4	7.0	5.7	5.5	4.2	4.5	6.3	7.4	6.4	5.8	4.8	6.1	5.1	5.8
THOROUGHBRED	5.6	6.0	6.7	5.7	5.5	4.4	5.0	5.0	7.7	6.5	5.9	5.2	6.0	5.1	5.8
WRANGLER	5.0	6.0	7.3	5.9	6.0	4.7	5.6	4.5	7.8	6.4	5.8	4.4	6.2	5.5	5.8
TRADITION (PST-DBC)	5.1	6.1	7.3	5.7	5.5	4.3	5.3	4.8	7.7	6.0	5.8	4.4	6.2	4.5	5.8
TRAILBLAZER	5.9	4.9	8.0	6.1	6.6	4.3	5.6	5.1	7.7	6.2	5.8	4.9	5.8	4.9	5.8
PST-5AP	5.0	5.8	6.7	5.7	5.3	4.2	5.5	4.4	7.6	6.3	6.3	4.5	6.0	5.0	5.8
JAGUAR II	5.1	5.6	7.3	5.8	5.7	5.0	5.8	5.0	7.6	6.3	6.3	4.3	5.9	4.9	5.8
EMPEROR (PICK SLD)	5.4	5.8	6.7	5.5	5.9	4.1	5.3	5.1	7.6	6.8	6.1	5.4	5.8	4.1	5.8
BRAHMA (LEGEND)	5.6	5.9	7.0	5.6	5.7	4.0	5.2	5.7	7.6	6.6	5.1	4.9	5.3	4.8	5.7
PST-5EN	5.0	5.3	7.0	5.8	4.9	4.5	5.5	5.2	7.7	6.5	5.8	4.8	6.0	5.9	5.7
BARNONE (BAR FA 7851)	4.7	4.8	7.3	5.4	5.6	4.1	5.1	5.5	7.9	6.1	5.8	5.3	5.7	4.6	5.7
MURIETTA (PST-5D7)	5.2	4.8	8.0	5.7	5.9	4.4	4.9	4.5	7.7	6.1	5.7	4.8	6.0	4.9	5.7
APACHE	5.1	4.9	7.0	5.6	5.0	4.6	5.4	5.1	7.2	6.4	5.7	5.1	5.7	5.5	5.7
TAURUS	5.4	4.3	7.3	5.8	5.3	4.1	5.3	5.8	7.6	6.0	5.7	5.0	5.8	5.6	5.7
TITAN	5.0	5.2	7.0	5.6	4.7	4.2	5.1	5.4	7.4	6.3	5.9	5.2	6.0	5.3	5.7

TABLE 1. (CONTINUED)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT TWENTY-NINE LOCATIONS IN THE UNITED STATES
1991 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF														MEAN
	NJ1	NJ2	OH2	OK1	OR1	RI1	TX1	TX2	UB1	UB2	VA1	VA3	VA4	VA6	
CIMMARON	4.9	5.0	7.3	5.3	5.3	3.7	5.4	4.8	7.8	6.4	5.5	4.8	5.3	5.2	5.6
ARID	4.7	4.9	6.0	5.8	5.0	4.2	6.0	5.5	7.1	6.0	5.5	4.7	5.9	4.7	5.6
OLYMPIC	5.0	5.1	6.7	5.5	5.3	4.5	5.2	5.6	7.5	6.0	5.6	5.4	5.7	5.0	5.6
FINELAWN 5GL	4.3	4.6	7.3	5.6	5.2	4.0	4.9	5.4	7.1	6.1	5.8	5.3	5.8	5.4	5.6
CAREFREE	4.8	4.7	7.3	5.6	5.1	4.3	5.0	4.9	7.3	6.4	5.4	4.4	5.6	5.1	5.5
JB-2	4.8	5.0	7.0	5.3	5.1	4.5	5.5	4.6	7.3	6.0	5.8	4.5	5.6	4.9	5.5
JAGUAR	4.7	4.3	7.0	5.3	5.3	4.5	5.6	5.2	7.2	5.9	5.8	4.6	5.9	4.8	5.5
BEL 86-1	5.3	4.2	7.3	5.7	4.9	4.0	5.0	4.9	7.4	6.0	5.7	5.4	5.7	4.3	5.5
TRIDENT	4.3	4.8	7.0	5.5	4.7	3.5	5.2	5.1	7.3	6.2	5.4	5.2	5.6	4.9	5.5
REBEL	4.6	4.1	7.0	5.6	4.6	4.5	5.3	5.5	7.0	5.8	5.7	4.4	5.7	4.9	5.5
ADVENTURE	3.9	4.1	7.0	5.4	5.0	3.9	5.4	4.8	6.8	5.6	5.5	4.9	5.3	4.8	5.4
FALCON	3.8	4.1	7.0	5.8	4.1	3.8	5.2	5.6	6.7	5.5	5.6	4.9	5.4	4.9	5.3
WILLAMETTE	3.5	4.1	6.7	5.5	4.3	3.9	5.1	5.4	7.0	5.5	5.3	4.5	5.3	4.8	5.3
FATIMA	3.5	3.0	6.3	5.7	4.1	3.3	4.6	5.2	6.8	5.4	5.8	5.6	5.3	5.0	5.3
AQUARA (SYN GA)	3.8	4.2	7.0	5.6	3.9	2.8	5.1	5.3	6.4	5.8	5.3	5.2	5.2	4.6	5.2
PACER	3.6	3.7	6.7	5.5	4.1	3.4	5.0	5.3	7.0	5.1	5.3	3.9	5.6	4.5	5.2
FINELAWN I	3.6	3.7	6.7	5.5	4.1	3.8	5.2	4.8	6.5	5.3	4.9	4.7	5.4	4.9	5.2
RICHMOND	3.4	3.3	6.3	5.5	4.3	3.6	5.0	5.4	6.9	5.3	5.1	4.2	5.4	4.9	5.1
TIP	3.1	3.3	6.7	5.5	4.4	3.6	4.8	5.1	6.6	5.5	5.2	4.1	5.3	4.8	5.1
KY-31	2.1	2.4	6.3	5.5	2.8	2.4	4.9	5.0	5.4	4.2	4.4	4.5	4.4	4.2	4.5
LSD VALUE	1.0	1.5	0.8	0.6	0.9	0.9	0.6	1.2	0.3	0.6	0.5	0.7	0.4	0.9	0.2

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 2.

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH
MONTH GROWN AT TWENTY-NINE LOCATIONS IN THE UNITED STATES
1991 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 1/

NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
SHENANDOAH (PE-7E)	6.3	5.6	6.0	6.2	6.7	6.2	6.1	6.3	6.5	6.6	6.3	6.3	6.3
HUBBARD 87	6.3	5.5	6.0	6.3	6.8	6.1	5.9	6.0	6.1	6.4	6.3	5.9	6.2
GUARDIAN (PICK 845PN)	6.1	5.6	6.0	6.3	6.7	6.1	5.8	5.9	6.2	6.5	6.1	6.0	6.1
VEGAS (NORMARC 99)	6.3	5.4	5.6	6.3	6.7	6.2	5.7	6.0	6.2	6.4	6.1	5.8	6.1
CROSSFIRE (PICK TF9)	6.4	5.7	5.9	6.3	6.8	6.1	5.9	5.9	6.1	6.3	6.2	6.1	6.1
COCHISE (PICK 127)	5.9	5.4	5.7	6.4	6.7	6.1	5.7	5.8	5.9	6.4	6.0	5.9	6.1
AMIGO (PST-5HF)	6.7	6.0	6.2	6.1	6.6	6.0	5.7	5.7	6.1	6.2	6.1	5.7	6.0
SHORTSTOP (PICK DDF)	6.3	5.4	5.8	6.2	6.7	6.2	5.6	6.0	6.0	6.5	5.9	5.8	6.0
ANTHEM (KWS-DUR)	5.9	5.4	5.7	6.1	6.6	6.0	5.9	6.0	6.0	6.4	6.0	5.8	6.0
TRIBUTE	6.3	5.5	5.7	5.9	6.4	6.0	5.9	6.1	6.2	6.2	6.0	5.6	6.0
SAFARI (PST-5MW)	6.0	5.7	5.8	6.2	6.5	5.9	5.8	5.8	6.1	6.4	6.1	5.5	6.0
EEL 86-2	6.1	5.1	5.7	6.2	6.6	6.0	5.9	5.9	6.1	6.3	6.1	5.4	6.0
MONARCH	6.0	5.6	5.7	6.3	6.5	6.2	5.8	5.9	6.1	6.3	5.9	5.5	6.0
EE-7	6.0	5.2	5.7	6.2	6.6	6.1	5.8	5.8	6.0	6.0	5.8	5.8	6.0
HOENIX (NORMARC 77)	6.0	5.3	5.7	5.9	6.3	6.1	5.7	5.8	6.1	6.2	5.9	5.8	6.0
AUSTIN (NORMARC 25)	5.6	5.4	5.9	6.0	6.4	6.2	5.7	5.8	5.8	6.1	5.9	5.4	6.0
OLYMPIC II (PST-5OL)	6.2	5.5	5.9	5.9	6.4	6.0	5.6	5.9	6.0	6.3	6.2	5.7	5.9
ELDORADO (PST-5D1)	6.2	5.5	5.8	6.0	6.4	6.1	5.6	5.9	5.8	6.3	6.0	5.6	5.9
TWILIGHT (KWS-BG-6)	6.1	5.4	5.6	6.1	6.6	6.3	5.8	5.7	5.9	6.2	5.8	5.7	5.9
WINCHESTER (PST-5F2)	6.0	5.3	5.6	6.0	6.4	6.0	5.6	5.7	5.8	6.1	5.9	5.5	5.9
AZTEC	6.1	5.1	5.9	6.0	6.7	6.1	5.7	5.7	5.9	6.2	6.0	5.7	5.9
AVANTI (PICK DM)	6.2	5.0	5.7	6.2	6.5	5.9	5.6	5.7	5.9	6.2	6.0	5.2	5.9
SILVERADO (PST-5BL)	6.3	5.5	5.7	6.2	6.7	6.0	5.6	5.6	5.7	6.0	5.9	5.4	5.9
MAVERICK II (PICK GH6)	6.3	5.4	5.7	5.9	6.5	5.9	5.4	5.7	5.9	5.9	6.2	5.8	5.8
CHIEFTAIN	6.2	5.2	5.6	5.8	6.4	5.9	5.5	5.6	5.7	6.2	6.1	5.8	5.8
EST-5AG	6.5	5.6	6.0	5.9	6.5	5.8	5.6	5.8	5.8	6.1	6.0	5.4	5.8
REBEL II	6.2	5.3	5.9	5.7	6.2	5.8	5.7	5.8	5.7	6.0	6.1	5.4	5.8
BONANZA	6.3	5.2	5.9	6.0	6.3	5.8	5.6	5.8	5.9	5.9	5.8	5.2	5.8
SUNDANCE	5.8	5.6	5.7	5.9	6.3	5.9	5.5	5.7	5.8	6.0	5.8	5.4	5.8
MESA	5.8	5.5	5.8	5.6	6.2	5.7	5.7	5.6	5.9	6.1	5.8	5.4	5.8
ARRIBA (PST-5DM)	5.9	5.4	5.5	6.0	6.5	6.0	5.7	5.6	5.6	6.0	5.8	5.7	5.8
THOROUGHbred	6.3	5.3	5.7	5.8	6.3	6.0	5.6	5.7	5.7	6.0	5.7	5.7	5.8
WRANGLER	6.3	5.2	5.9	6.0	6.4	5.9	5.4	5.7	5.7	6.1	5.9	5.5	5.8
TRADITION (PST-DBC)	6.1	5.4	5.7	5.7	6.2	5.8	5.5	5.6	6.0	5.9	5.7	5.6	5.8
TRAILBLAZER	6.4	5.5	5.9	6.0	6.6	6.0	5.1	5.5	5.6	6.0	5.7	5.4	5.8
EST-5AP	5.8	5.1	5.6	5.8	6.3	5.8	5.6	5.7	6.0	5.7	5.7	5.2	5.8
EMPEROR (PICK SLD)	6.1	5.4	5.6	6.1	6.4	5.9	5.4	5.5	5.9	6.0	5.7	5.6	5.8
JAGUAR II	6.1	5.3	5.6	5.6	6.3	5.8	5.6	5.6	5.7	6.0	6.0	5.5	5.8
EST-5EN	5.8	5.2	5.3	5.7	6.2	5.9	5.5	5.7	5.8	6.1	5.9	5.5	5.7
BARNONE (BAR FA 7851)	6.2	5.4	5.6	5.6	6.2	5.8	5.5	5.7	5.8	6.1	5.7	5.4	5.7
ERAHMA (LEGEND)	6.3	5.3	5.6	5.9	6.3	5.7	5.4	5.5	5.6	6.1	5.9	5.8	5.7
MURIELTA (PST-5D7)	6.0	5.1	5.6	5.8	6.6	5.7	5.4	5.5	5.6	6.0	5.7	5.1	5.7
APACHE	5.7	5.2	5.6	5.8	6.2	5.8	5.6	5.7	5.7	6.0	5.8	5.2	5.7
TAURUS	6.1	5.6	5.5	5.9	6.2	5.6	5.4	5.5	5.9	6.2	6.0	5.3	5.7
TITAN	5.7	5.4	5.6	5.6	6.2	5.7	5.5	5.5	5.6	5.8	5.5	5.3	5.7

TABLE 2. (CONTINUED) MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH MONTH GROWN AT TWENTY-NINE LOCATIONS IN THE UNITED STATES 1991 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
CIMMARON	5.9	5.2	5.7	5.6	6.1	5.7	5.3	5.6	5.5	5.8	5.6	5.3	5.6
ARID	6.1	5.6	5.6	5.3	6.0	5.7	5.6	5.6	5.8	6.0	5.9	5.4	5.6
OLYMPIC	6.0	5.6	5.5	5.6	6.1	5.7	5.3	5.4	5.5	5.8	5.8	5.5	5.6
FINELAWN 5GL	6.0	5.5	5.4	5.6	5.9	5.6	5.3	5.3	5.5	5.9	5.6	5.3	5.6
CAREFREE	5.7	5.2	5.7	5.6	6.2	5.7	5.2	5.4	5.4	5.5	5.4	5.0	5.5
JB-2	6.3	5.3	5.7	5.6	6.1	5.6	5.4	5.2	5.1	5.8	5.7	5.3	5.5
BEL 86-1	5.7	5.0	5.6	5.7	6.1	5.4	5.3	5.5	5.4	5.6	5.4	5.1	5.5
TRIDENT	5.8	5.2	5.2	5.3	5.9	5.7	5.3	5.3	5.6	5.8	5.4	5.5	5.5
JAGUAR	6.2	5.2	5.3	5.5	6.0	5.6	5.4	5.3	5.3	5.7	5.7	5.0	5.5
REBEL	6.0	5.4	5.3	5.2	5.9	5.5	5.1	5.4	5.6	5.8	5.9	5.1	5.4
ADVENTURE	6.1	5.4	5.3	5.3	5.8	5.3	5.3	5.1	5.4	5.4	5.5	5.3	5.4
WILLAMETTE	5.9	5.2	5.3	5.1	5.7	5.5	5.1	5.1	5.4	5.5	5.4	5.1	5.3
FALCON	5.6	5.0	5.2	5.2	5.9	5.4	5.3	5.1	5.1	5.4	5.3	5.1	5.3
FATIMA	5.2	5.0	5.1	5.0	5.7	5.4	5.2	5.2	5.3	5.3	5.3	5.0	5.3
AQUARA (SYN GA)	5.3	5.0	5.3	5.0	5.7	5.3	5.1	5.1	5.1	5.4	5.3	5.2	5.2
PACER	5.6	5.0	5.2	5.0	5.8	5.2	5.1	5.1	5.2	5.4	5.3	4.9	5.2
FINELAWN I	5.5	5.1	5.2	5.0	5.6	5.3	4.8	5.0	5.2	5.4	5.3	5.1	5.2
RICHMOND	5.6	4.9	5.2	5.0	5.5	5.2	4.9	5.1	5.2	5.3	5.3	4.9	5.1
TIP	6.2	5.1	5.2	5.0	5.5	5.1	5.0	4.9	5.2	5.2	5.2	4.9	5.1
KY-31	4.9	4.2	4.3	4.2	4.8	4.6	4.2	4.4	4.2	4.6	4.3	4.1	4.5
LSD VALUE	0.7	1.2	1.0	0.4	0.3	0.4	0.5	0.5	0.5	0.6	0.6	0.9	0.3

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 3.

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT TWENTY-NINE LOCATIONS IN THE UNITED STATES 1/
1991 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN: STATE LOCATIONS REPORTING 2/

NAME	AR1	AZ1	CA1	CA2	CA3	GA1	IA1	IL2	IN1	IN2	KS2	MD1	MI1	MO1	MO3
SHENANDOAH (PE-7E)	3.0	9.5	10.0	23.5	28.5	3.0	2.5	1.0	4.0	6.5	6.5	7.5	48.0	17.5	8.0
HUBBARD 87	22.0	19.0	20.5	49.0	12.5	9.0	10.5	16.0	1.0	47.0	2.5	5.0	26.0	7.5	16.5
VEGAS (NORMARC 99)	2.0	37.5	35.5	2.0	12.5	34.5	10.5	11.0	6.0	1.5	2.5	24.0	61.0	7.5	4.0
GUARDIAN (PICK 845PN)	4.0	19.0	10.0	23.5	12.5	28.5	22.5	51.0	23.5	3.5	19.0	2.5	42.5	56.0	14.0
CROSSFIRE (PICK TF9)	1.0	30.0	7.0	10.5	12.5	1.0	45.0	23.0	16.0	32.0	25.5	2.5	16.0	64.5	7.0
COCHISE (PICK 127)	9.0	30.0	46.0	23.5	59.0	6.5	15.0	35.5	16.0	11.0	59.5	16.5	19.5	1.5	14.0
AMIGO (PST-5HF)	12.0	19.0	15.5	10.5	61.5	13.5	19.5	53.0	23.5	16.0	2.5	16.5	26.0	17.5	24.5
SHORTSTOP (PICK DDF)	5.0	30.0	25.5	23.5	12.5	45.5	6.0	32.0	41.5	1.5	33.0	34.5	4.0	1.5	20.5
ANTHEM (KWS-DUR)	14.0	19.0	22.0	10.5	12.5	24.0	10.5	48.5	16.0	25.5	33.0	59.0	38.0	7.5	2.0
BEL 86-2	19.5	2.5	8.0	15.0	3.0	6.5	4.0	11.0	2.5	38.0	33.0	2.5	54.5	17.5	18.0
TRIBUTE	26.0	30.0	35.5	23.5	3.0	4.0	2.5	5.5	9.0	3.5	6.5	16.5	48.0	17.5	44.0
SAFARI (PST-5MW)	62.0	9.5	12.5	38.0	28.5	16.0	38.0	45.0	16.0	32.0	19.0	16.5	26.0	35.5	10.0
MONARCH	10.0	9.5	5.5	2.0	12.5	24.0	55.0	14.0	9.0	21.0	10.0	7.5	54.5	35.5	10.0
PE-7	27.5	19.0	20.5	23.5	28.5	10.0	24.5	61.0	16.0	25.5	6.5	7.5	1.0	56.0	14.0
PHOENIX (NORMARC 77)	52.0	37.5	24.0	38.0	12.5	13.5	7.5	20.0	46.5	38.0	13.5	16.5	13.5	7.5	28.5
AUSTIN (NORMARC 25)	36.0	30.0	35.5	23.5	45.0	18.5	40.5	.	23.5	.	52.5	16.5	51.5	7.5	43.0
OLYMPIC II (PST-5OL)	8.0	37.5	18.5	23.5	28.5	38.5	43.5	40.5	6.0	38.0	6.5	16.5	19.5	35.5	31.0
ELDORADO (PST-5D1)	30.5	44.5	23.0	49.0	28.5	31.0	13.5	40.5	41.5	38.0	48.0	34.5	48.0	35.5	3.0
TWILIGHT (KWS-BG-6)	6.0	19.0	25.5	44.5	45.0	49.0	1.0	.	54.0	25.5	41.5	34.5	38.0	17.5	1.0
WINCHESTER (PST-5F2)	36.0	19.0	30.0	5.0	45.0	34.5	13.5	8.0	51.0	25.5	13.5	34.5	38.0	7.5	24.5
AZTEC	23.5	9.5	12.5	4.0	28.5	53.0	49.0	20.0	2.5	55.5	59.5	34.5	58.0	56.0	5.0
AVANTI (PICK DM)	49.0	9.5	3.0	2.0	12.5	16.0	19.5	35.5	11.0	46.0	41.5	2.5	60.0	35.5	41.5
SILVERADO (PST-5BL)	27.5	4.5	3.0	38.0	12.5	43.0	43.5	59.5	41.5	25.5	25.5	50.5	48.0	35.5	6.0
MAVERICK II (PICK GH6)	45.0	4.5	18.5	23.5	28.5	24.0	46.5	20.0	23.5	64.0	41.5	34.5	30.5	56.0	20.5
CHIEFTAIN	49.0	44.5	35.5	6.0	45.0	38.5	18.0	48.5	41.5	51.0	48.0	7.5	19.5	35.5	30.0
PST-5AG	12.0	30.0	40.0	38.0	3.0	59.0	29.5	40.5	33.0	11.0	19.0	16.5	19.5	56.0	20.5
REBEL II	32.5	1.0	15.5	32.0	28.5	24.0	35.0	20.0	16.0	25.5	25.5	16.5	26.0	17.5	49.0
ARRIBA (PST-5DM)	25.0	2.5	3.0	23.5	3.0	37.0	32.5	16.0	6.0	25.5	64.5	34.5	58.0	56.0	36.0
BONANZA	36.0	52.5	30.0	10.5	45.0	24.0	29.5	58.0	33.0	6.5	33.0	34.5	19.5	56.0	24.5
SUNDANCE	42.0	30.0	54.0	10.5	28.5	49.0	5.0	20.0	33.0	16.0	19.0	50.5	26.0	35.5	27.0
MESA	39.0	9.5	30.0	55.0	45.0	2.0	16.5	35.5	33.0	6.5	25.5	34.5	.	35.5	28.5
THOROUGHbred	19.5	44.5	30.0	38.0	12.5	31.0	27.0	57.0	33.0	32.0	13.5	34.5	10.0	56.0	32.0
WRANGLER	12.0	52.5	1.0	23.5	45.0	56.0	60.0	3.5	16.0	51.0	41.5	50.5	.	35.5	36.0
TRADITION (PST-DBC)	7.0	44.5	44.5	55.0	28.5	6.5	27.0	55.0	33.0	6.5	10.0	34.5	30.5	35.5	39.0
TRAILBLAZER	58.5	30.0	15.5	23.5	38.0	63.0	63.5	55.0	49.5	38.0	19.0	34.5	42.5	7.5	12.0
PST-5AP	15.5	30.0	54.0	38.0	54.5	40.5	7.5	2.0	33.0	18.5	19.0	34.5	45.0	17.5	34.0
JAGUAR II	32.5	60.5	43.0	55.0	12.5	20.5	35.0	45.0	16.0	62.0	41.5	16.5	13.5	35.5	41.5
EMPEROR (PICK SLD)	45.0	57.0	40.0	38.0	28.5	31.0	35.0	3.5	41.5	43.5	56.0	16.5	7.5	56.0	10.0
BRAHMA (LEGEND)	23.5	57.0	10.0	23.5	28.5	60.0	40.5	32.0	23.5	32.0	13.5	50.5	4.0	35.5	24.5
PST-5EN	15.5	57.0	.	49.0	54.5	16.0	24.5	59.5	33.0	11.0	52.5	34.5	26.0	35.5	33.0
BARNONE (BAR FA 7851)	30.5	19.0	30.0	23.5	12.5	11.5	21.0	.	56.0	14.0	25.5	34.5	51.5	56.0	39.0
MURIETTA (PST-5D7)	45.0	44.5	5.5	10.5	28.5	43.0	27.0	43.0	9.0	55.5	41.5	50.5	13.5	35.5	16.5
APACHE	17.0	37.5	49.5	62.0	28.5	28.5	10.5	5.5	41.5	51.0	33.0	16.5	38.0	56.0	20.5
TAURUS	19.5	9.5	35.5	10.5	45.0	49.0	32.5	40.5	46.5	11.0	33.0	50.5	33.5	35.5	39.0
TITAN	42.0	49.5	49.5	55.0	28.5	6.5	38.0	32.0	54.0	43.5	33.0	34.5	10.0	7.5	56.5

TABLE 3. (CONTINUED)

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT TWENTY-NINE LOCATIONS IN THE UNITED STATES
1991 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN: STATE LOCATIONS REPORTING

NAME	AR1	AZ1	CA1	CA2	CA3	GA1	IA1	IL2	IN1	IN2	KS2	MD1	MI1	MO1	MO3
CIMMARON	54.5	19.0	47.5	38.0	45.0	45.5	22.5	28.5	59.5	59.5	2.5	34.5	4.0	35.5	36.0
ARID	19.5	37.5	35.5	10.5	12.5	18.5	31.0	7.0	46.5	16.0	41.5	34.5	10.0	35.5	56.5
OLYMPIC	49.0	44.5	54.0	38.0	45.0	56.0	57.0	30.0	27.0	51.0	10.0	16.5	7.5	35.5	49.0
FINELAWN 5GL	49.0	52.5	47.5	38.0	54.5	34.5	42.0	52.0	23.5	11.0	48.0	50.5	38.0	35.5	59.0
CAREFREE	57.0	9.5	44.5	59.5	28.5	62.0	46.5	11.0	33.0	32.0	33.0	34.5	4.0	35.5	55.0
JB-2	40.0	19.0	15.5	38.0	54.5	53.0	63.5	11.0	33.0	20.0	62.5	50.5	.	17.5	53.5
JAGUAR	63.0	25.0	56.0	23.5	45.0	11.5	53.0	38.0	16.0	51.0	62.5	16.5	54.5	7.5	58.0
BEL 86-1	60.0	19.0	27.0	23.5	45.0	56.0	38.0	48.5	61.5	18.5	41.5	34.5	54.5	35.5	45.0
TRIDENT	58.5	44.5	57.5	59.5	3.0	43.0	16.5	11.0	52.0	63.0	52.5	50.5	26.0	17.5	46.5
REBEL	49.0	49.5	40.0	49.0	28.5	61.0	51.5	55.0	46.5	51.0	25.5	50.5	33.5	56.0	46.5
ADVENTURE	56.0	44.5	42.0	44.5	28.5	40.5	59.0	16.0	33.0	43.5	33.0	50.5	58.0	56.0	61.0
FALCON	64.0	57.0	51.0	49.0	63.0	27.0	49.0	25.5	54.0	51.0	59.5	50.5	.	56.0	51.0
WILLAMETTE	36.0	52.5	52.0	58.0	59.0	58.0	61.5	48.5	49.5	57.0	19.0	59.0	4.0	35.5	52.0
FATIMA	36.0	37.5	61.0	61.0	64.0	49.0	54.0	28.5	59.5	38.0	56.0	62.5	19.5	7.5	62.0
AQUARA (SYN GA)	54.5	57.0	62.0	49.0	45.0	49.0	51.5	45.0	58.0	58.0	48.0	59.0	33.5	35.5	53.5
PACER	53.0	62.5	60.0	55.0	54.5	20.5	49.0	25.5	57.0	38.0	52.5	59.0	48.0	64.5	49.0
FINELAWN I	42.0	64.0	59.0	64.0	61.5	34.5	57.0	62.0	61.5	43.5	59.5	59.0	13.5	35.5	60.0
RICHMOND	61.0	62.5	63.0	63.0	54.5	53.0	57.0	25.5	63.0	25.5	48.0	64.0	42.5	56.0	63.0
TIP	29.0	60.5	57.5	49.0	59.0	64.0	61.5	35.5	64.0	59.5	56.0	62.5	42.5	17.5	64.0
KY-31	65.0	65.0	64.0	65.0	65.0	65.0	65.0	25.5	65.0	61.0	64.5	65.0	33.5	35.5	65.0

1/ THIS TABLE CONTAINS NO STATISTICAL VALUES (LSD VALUES) THEREFORE IT SHOULD ONLY BE USED TO DETERMINE THE GENERAL PERFORMANCE OF AN ENTRY OR ENTRIES ACROSS SEVERAL LOCATIONS OR REGIONS. TO ASSESS STATISTICAL DIFFERENCES AMONG ENTRIES, REFER TO THE MEANS AND LSD VALUES FOUND IN TABLE 1.

2/ RANKING OF MEAN TURFGRASS QUALITY IS ACHIEVED BY ASSIGNING "1" TO THE HIGHEST MEAN, "2" TO THE SECOND HIGHEST MEAN, ETC. FOR EACH LOCATION. FOR EXAMPLE, IF TWO MEANS ARE TIED FOR THE SECOND AND THIRD RANKS, BOTH ARE ASSIGNED "2.5".

TABLE 3. (CONTINUED)

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT TWENTY-NINE LOCATIONS IN THE UNITED STATES
1991 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN: STATE LOCATIONS REPORTING

NAME	NJ1	NJ2	OH2	OK1	OR1	RI1	TX1	TX2	UB1	UB2	VA1	VA3	VA4	VA6	MEAN
SHENANDOAH (PE-7E)	13.0	5.0	3.5	26.5	7.5	17.5	8.5	7.0	7.0	8.0	1.0	1.0	3.0	4.0	1
HUBBARD 87	16.0	1.5	3.5	8.5	4.5	4.0	13.5	9.5	7.0	12.5	2.0	21.0	2.0	14.5	2
VEGAS (NORMARC 99)	1.0	13.0	12.5	19.0	10.0	20.5	22.5	36.5	21.0	9.0	14.5	28.5	13.0	27.5	3
GUARDIAN (PICK 845PN)	5.0	1.5	12.5	8.5	9.0	25.5	46.5	3.0	1.0	16.0	20.0	34.0	6.5	19.0	4
CROSSFIRE (PICK TF9)	7.0	8.0	28.0	2.5	6.0	11.5	18.0	19.5	3.5	24.5	14.5	28.5	15.0	55.0	5
COCHISE (PICK 127)	5.0	3.0	3.5	60.0	26.0	14.0	18.0	19.5	3.5	2.0	40.0	8.0	21.0	34.0	6
AMIGO (PST-5HF)	20.0	27.0	3.5	26.5	1.0	22.0	31.5	5.0	18.5	14.0	14.5	28.5	8.0	52.5	7
SHORTSTOP (PICK DDF)	14.5	27.0	28.0	5.5	13.0	36.0	18.0	42.0	13.0	6.0	10.0	3.0	6.5	34.0	8
ANTHEM (KWS-DUR)	11.5	5.0	28.0	60.0	16.0	31.5	31.5	16.0	3.5	10.0	25.0	2.0	9.0	57.0	9
BEL 86-2	22.0	33.5	12.5	11.0	36.5	11.5	5.5	32.0	16.0	3.5	4.5	23.5	1.0	19.0	10
TRIBUTE	18.5	19.0	28.0	5.5	31.0	11.5	27.0	9.5	23.0	15.0	20.0	9.5	11.0	25.0	11
SAFARI (PST-5MM)	8.0	7.0	28.0	4.0	7.5	3.0	2.5	1.5	23.0	17.5	25.0	28.5	27.5	43.5	12
MONARCH	2.0	17.0	28.0	57.0	11.0	5.5	63.0	22.5	7.0	11.0	20.0	4.0	17.0	48.0	13
PE-7	25.5	12.0	12.5	14.0	19.0	36.0	27.0	29.5	10.0	1.0	7.5	5.5	36.0	43.5	14
PHOENIX (NORMARC 77)	34.0	24.0	12.5	8.5	23.5	9.0	13.5	7.0	41.0	19.5	4.5	9.5	27.5	34.0	15
AUSTIN (NORMARC 25)	22.0	15.0	28.0	33.5	40.0	11.5	5.5	4.0	10.0	39.5	10.0	50.0	38.5	10.5	16
OLYMPIC II (PST-5OL)	28.5	35.0	12.5	26.5	21.0	17.5	10.5	14.0	41.0	31.5	32.5	12.0	15.0	3.0	17
ELDORADO (PST-5D1)	9.5	5.0	28.0	19.0	18.0	36.0	35.0	19.5	16.0	12.5	40.0	32.5	44.0	5.0	18
TWILIGHT (KWS-BG-6)	11.5	44.5	12.5	19.0	12.0	36.0	61.0	36.5	37.0	54.0	32.5	5.5	41.5	60.0	19
WINCHESTER (PST-5F2)	31.0	9.5	28.0	46.0	48.5	17.5	42.5	25.0	16.0	35.0	20.0	47.5	31.5	8.5	20
AZTEC	3.0	21.5	12.5	64.0	22.0	1.5	5.5	49.5	3.5	22.0	14.5	16.5	4.0	34.0	21
AVANTI (PICK DM)	5.0	14.0	45.5	52.5	15.0	5.5	8.5	60.0	18.5	3.5	25.0	50.0	22.5	19.0	22
SILVERADO (PST-5BL)	9.5	23.0	28.0	2.5	2.0	7.5	46.5	60.0	13.0	22.0	32.5	43.0	38.5	62.5	23
MAVERICK II (PICK GH6)	30.0	11.0	45.5	19.0	25.0	29.0	18.0	36.5	25.0	19.5	53.5	32.5	11.0	2.0	24
CHIEFTAIN	25.5	27.0	12.5	57.0	14.0	15.0	22.5	36.5	41.0	39.5	20.0	12.0	24.0	10.5	25
PST-5AG	39.5	56.0	12.5	19.0	3.0	36.0	2.5	54.0	28.5	6.0	4.5	14.5	5.0	61.0	26
REBEL II	34.0	40.0	45.5	26.5	27.0	1.5	27.0	46.0	45.0	31.5	14.5	52.5	18.5	19.0	27
ARRIBA (PST-5DM)	39.5	9.5	12.5	33.5	28.5	17.5	39.0	32.0	28.5	39.5	10.0	36.5	11.0	48.0	28
BONANZA	28.5	38.0	12.5	38.5	28.5	29.0	18.0	42.0	10.0	27.5	46.0	28.5	15.0	23.5	29
SUNDANCE	22.0	31.5	45.5	33.5	40.0	45.5	27.0	16.0	28.5	44.0	46.0	16.5	33.0	12.5	30
MESA	46.5	31.5	45.5	33.5	35.0	43.0	65.0	1.5	45.0	27.5	40.0	43.0	22.5	22.0	31
THOROUGHBRED	18.5	19.0	57.5	33.5	34.0	36.0	53.0	51.0	32.5	24.5	25.0	23.5	27.5	19.0	32
WRANGLER	45.0	19.0	28.0	8.5	17.0	20.5	10.5	63.0	20.0	27.5	40.0	59.0	20.0	7.0	33
TRADITION (PST-DBC)	37.0	16.0	28.0	26.5	36.5	42.0	36.5	60.0	28.5	50.0	32.5	59.0	18.5	58.5	34
TRAILBLAZER	14.5	42.5	3.5	1.0	4.5	40.5	13.5	46.0	28.5	42.0	32.5	39.5	40.0	41.0	35
PST-5AP	42.5	27.0	57.5	26.5	40.0	45.5	22.5	65.0	34.5	35.0	7.5	55.5	27.5	27.5	36
JAGUAR II	37.0	30.0	28.0	12.0	32.0	7.5	5.5	49.5	37.0	35.0	4.5	62.0	36.0	41.0	37
EMPEROR (PICK SLD)	25.5	27.0	57.5	46.0	23.5	48.0	36.5	46.0	37.0	6.0	14.5	12.0	44.0	65.0	38
BRAHMA (LEGEND)	17.0	21.5	45.5	38.5	30.0	51.0	42.5	11.0	34.5	17.5	62.5	39.5	60.5	48.0	39
PST-5EN	42.5	33.5	45.5	14.0	52.0	25.5	27.0	36.5	28.5	22.0	32.5	45.0	27.5	1.0	40
BARNONE (BAR FA 7851)	50.0	46.0	28.0	60.0	33.0	49.5	50.0	22.5	13.0	44.0	32.5	19.5	49.5	55.0	41
MURIELTA (PST-5D7)	34.0	47.5	3.5	26.5	20.0	36.0	59.5	64.0	32.5	46.0	46.0	27.5	27.5	34.0	42
APACHE	37.0	44.5	45.5	42.5	48.5	23.0	31.5	46.0	51.0	27.5	46.0	35.0	47.5	8.5	43
TAURUS	25.5	51.5	28.0	14.0	43.5	49.5	39.0	7.0	39.0	51.5	46.0	36.5	44.0	6.0	44
TITAN	42.5	36.0	45.5	42.5	54.5	45.5	52.0	27.5	47.0	37.0	25.0	28.5	31.5	14.5	45

TABLE 3. (CONTINUED)

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT TWENTY-NINE LOCATIONS IN THE UNITED STATES
1991 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN: STATE LOCATIONS REPORTING

NAME	NJ1	NJ2	OH2	OK1	OR1	RI1	TX1	TX2	UB1	UB2	VA1	VA3	VA4	VA6	MEAN
CIMMARON	46.5	40.0	28.0	64.0	43.5	58.0	34.0	56.5	23.0	31.5	53.5	43.0	60.5	16.0	46
ARID	51.5	42.5	65.0	19.0	51.0	45.5	1.0	16.0	53.5	49.0	53.5	50.0	34.0	52.5	47
OLYMPIC	42.5	37.0	57.5	52.5	40.0	25.5	46.5	12.5	43.0	47.5	50.5	18.0	49.5	27.5	48
FINELAWN 5GL	55.0	50.0	28.0	42.5	45.0	52.0	58.0	25.0	53.5	44.0	32.5	19.5	41.5	12.5	49
CAREFREE	49.0	49.0	28.0	42.5	46.0	40.5	54.5	54.0	50.0	31.5	56.5	61.0	52.0	23.5	50
JB-2	48.0	40.0	45.5	62.0	47.0	29.0	22.5	62.0	48.5	47.5	32.5	55.5	52.0	34.0	51
JAGUAR	51.5	51.5	45.5	64.0	40.0	31.5	13.5	36.5	52.0	53.0	32.5	52.5	36.0	48.0	52
BEL 86-1	32.0	53.5	28.0	33.5	53.0	53.0	56.5	54.0	45.0	51.5	46.0	14.5	46.0	62.5	53
TRIDENT	54.0	47.5	45.5	46.0	54.5	61.0	46.5	42.0	48.5	39.5	56.5	25.0	52.0	34.0	54
REBEL	53.0	58.5	45.5	38.5	56.0	25.5	39.0	19.5	55.0	55.0	46.0	59.0	47.5	34.0	55
ADVENTURE	56.0	58.5	45.5	57.0	50.0	54.0	31.5	58.0	59.0	57.0	53.5	39.5	58.5	48.0	56
FALCON	57.5	56.0	45.5	19.0	60.0	56.5	42.5	12.5	61.0	58.0	50.5	39.5	56.0	34.0	57
WILLAMETTE	61.5	56.0	57.5	52.5	58.5	55.0	50.0	25.0	56.5	59.5	59.0	55.5	62.5	48.0	58
FATIMA	61.5	64.0	63.0	26.5	62.0	63.0	64.0	40.0	60.0	61.0	40.0	7.0	58.5	27.5	59
AQUARA (SYN GA)	57.5	53.5	45.5	38.5	64.0	64.0	50.0	29.5	64.0	56.0	59.0	22.0	64.0	55.0	60
PACER	59.0	60.5	57.5	48.5	62.0	62.0	56.5	32.0	56.5	64.0	59.0	65.0	54.0	58.5	61
FINELAWN I	60.0	60.5	57.5	52.5	62.0	56.5	42.5	56.5	63.0	63.0	64.0	47.5	55.0	41.0	62
RICHMOND	63.0	62.5	63.0	48.5	58.5	59.0	54.5	27.5	58.0	62.0	62.5	63.0	57.0	39.0	63
TIP	64.0	62.5	57.5	52.5	57.0	60.0	62.0	46.0	62.0	59.5	61.0	64.0	62.5	48.0	64
KY-31	65.0	65.0	63.0	52.5	65.0	65.0	59.5	52.0	65.0	65.0	65.0	55.5	65.0	64.0	65

1/ THIS TABLE CONTAINS NO STATISTICAL VALUES (LSD VALUES) THEREFORE IT SHOULD ONLY BE USED TO DETERMINE THE GENERAL PERFORMANCE OF AN ENTRY OR ENTRIES ACROSS SEVERAL LOCATIONS OR REGIONS. TO ASSESS STATISTICAL DIFFERENCES AMONG ENTRIES, REFER TO THE MEANS AND LSD VALUES FOUND IN TABLE 1.

2/ RANKING OF MEAN TURFGRASS QUALITY IS ACHIEVED BY ASSIGNING "1" TO THE HIGHEST MEAN, "2" TO THE SECOND HIGHEST MEAN, ETC. FOR EACH LOCATION. FOR EXAMPLE, IF TWO MEANS ARE TIED FOR THE SECOND AND THIRD RANKS, BOTH ARE ASSIGNED "2.5".

TABLE 4. GENETIC COLOR RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 1/

NAME	AR1	AZ1	MO3	OH2	OK1	MEAN
TWILIGHT (KWS-BG-6)	7.0	6.7	8.0	8.0	6.0	7.1
VEGAS (NORMARC 99)	7.7	7.0	5.7	8.0	6.7	7.0
CROSSFIRE (PICK TF9)	7.3	6.7	6.3	7.7	6.3	6.9
GUARDIAN (PICK 845FN)	6.7	6.7	6.0	7.7	6.7	6.7
SHORTSTOP (PICK DDF)	6.7	6.7	6.0	8.0	6.3	6.7
MAVERICK II (PICK GH6)	6.3	7.0	6.3	7.7	6.3	6.7
AZTEC	6.7	7.0	6.3	7.3	6.0	6.7
ELDORADO (PST-5D1)	6.3	7.0	6.3	7.3	6.3	6.7
ANTHEM (KWS-DUR)	6.3	6.7	7.0	7.7	5.3	6.6
PE-7	6.7	7.0	6.3	7.0	6.0	6.6
SILVERADO (PST-5BL)	6.7	7.0	5.7	8.0	5.7	6.6
COCHISE (PICK 127)	7.0	6.7	5.7	8.0	5.3	6.5
MONARCH	6.0	7.0	6.0	7.0	6.3	6.5
MURIELTA (PST-5D7)	6.3	6.7	5.0	8.0	6.0	6.4
OLYMPIC II (PST-5OL)	6.3	7.0	5.7	7.0	5.7	6.3
PHOENIX (NORMARC 77)	6.3	6.7	6.3	6.7	5.7	6.3
PST-5AP	6.0	7.0	5.7	7.0	6.0	6.3
SHENANDOAH (PE-7E)	6.7	7.0	5.0	7.3	5.7	6.3
SAFARI (PST-5MW)	5.7	7.0	5.3	7.3	6.3	6.3
TRADITION (PST-DBC)	6.0	6.3	6.0	7.0	6.3	6.3
AUSTIN (NORMARC 25)	6.3	6.7	4.0	7.3	7.0	6.3
AMIGO (PST-5HF)	6.3	7.0	5.3	7.3	5.3	6.3
HUBBARD 87	5.7	7.0	4.7	8.0	5.7	6.2
AVANTI (PICK DM)	6.3	7.0	5.0	7.0	5.7	6.2
MESA	5.7	6.7	5.7	7.0	6.0	6.2
TRAILBLAZER	5.7	7.0	5.0	7.3	6.0	6.2
BONANZA	6.0	6.7	5.0	7.0	6.0	6.1
BRAHMA (LEGEND)	6.7	6.0	5.0	7.3	5.7	6.1
EMPEROR (PICK SLD)	6.0	6.3	4.7	7.7	6.0	6.1
PST-5EN	6.3	6.7	4.7	7.0	6.0	6.1
BEL 86-2	6.0	7.0	5.3	7.0	5.3	6.1
TAURUS	6.3	7.0	4.0	7.3	6.0	6.1
ARRIBA (PST-5DM)	6.3	7.0	4.7	7.0	5.3	6.1
CIMMARON	5.3	7.0	5.0	7.0	6.0	6.1
WILLAMETTE	5.0	6.3	6.0	7.0	6.0	6.1
WINCHESTER (PST-5F2)	5.0	7.0	5.3	7.3	5.7	6.1
WRANGLER	6.0	6.7	4.3	7.3	6.0	6.1
OLYMPIC	5.0	6.7	5.7	7.0	5.7	6.0
BARNONE (BAR FA 7851)	6.0	7.0	4.7	7.0	5.3	6.0
BEL 86-1	5.3	6.7	5.0	7.0	6.0	6.0
CAREFREE	5.3	7.0	5.0	7.0	5.7	6.0
JAGUAR II	5.7	6.3	5.0	7.0	6.0	6.0
REBEL II	5.3	7.0	4.3	7.0	6.3	6.0
CHIEFTAIN	5.0	6.7	5.0	7.0	6.0	5.9
SUNDANCE	6.0	6.7	4.7	7.0	5.3	5.9

TABLE 4. GENETIC COLOR RATINGS OF TALL FESCUE CULTIVARS
(CONT'D) 1991 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN						
NAME	AR1	AZ1	MO3	OH2	OK1	MEAN
THOROUGHBRED	4.7	6.7	6.3	6.7	5.3	5.9
TITAN	5.7	6.0	4.7	7.0	6.0	5.9
TRIBUTE	5.0	6.7	4.7	7.3	5.7	5.9
FALCON	4.7	6.5	5.3	6.7	6.0	5.8
APACHE	4.7	6.7	4.7	7.0	5.7	5.7
PST-5AG	5.0	7.0	4.3	6.7	5.7	5.7
TRIDENT	4.7	6.3	4.7	7.0	6.0	5.7
FATIMA	4.7	6.7	5.0	6.3	5.7	5.7
PACER	4.7	6.0	5.0	7.0	5.7	5.7
ADVENTURE	5.3	6.7	3.7	7.0	5.7	5.7
FINELAWN 5GL	5.0	6.3	4.0	7.0	5.7	5.6
JB-2	5.3	6.7	3.7	7.0	5.3	5.6
JAGUAR	4.3	7.0	4.0	6.7	5.7	5.5
REBEL	5.0	6.0	4.7	6.3	5.7	5.5
FINELAWN I	5.0	6.0	4.0	7.0	5.3	5.5
RICHMOND	4.3	6.0	4.3	7.0	5.7	5.5
AQUARA (SYN GA)	5.0	6.3	3.7	6.3	5.7	5.4
ARID	5.0	6.7	3.7	6.0	5.3	5.3
TIP	4.0	6.3	3.0	6.7	5.0	5.0
KY-31	4.3	6.0	2.3	6.0	5.7	4.9
LSD VALUE	1.2	0.7	1.7	0.6	1.0	0.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 5. SPRING GREENUP RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 1/

NAME	OK1	VA3	MEAN
AVANTI (PICK DM)	4.0	5.3	4.7
PST-5AG	4.0	5.3	4.7
REBEL	4.0	5.3	4.7
ADVENTURE	4.0	5.0	4.5
BONANZA	4.0	5.0	4.5
FINELAWN 5GL	4.0	5.0	4.5
KY-31	4.3	4.7	4.5
PST-5AP	4.0	5.0	4.5
SUNDANCE	4.0	5.0	4.5
VEGAS (NORMARC 99)	4.0	5.0	4.5
ARID	4.0	4.7	4.3
BRAHMA (LEGEND)	4.0	4.7	4.3
CIMMARON	4.0	4.7	4.3
COCHISE (PICK 127)	4.0	4.7	4.3
FALCON	4.0	4.7	4.3
HUBBARD 87	4.0	4.7	4.3
MAVERICK II (PICK GH6)	4.0	4.7	4.3
OLYMPIC	4.0	4.7	4.3
PE-7	4.0	4.7	4.3
TAURUS	4.0	4.7	4.3
THOROUGHbred	4.0	4.7	4.3
TRADITION (PST-DBC)	4.0	4.7	4.3
MESA	4.3	4.3	4.3
AMIGO (PST-5HF)	4.0	4.3	4.2
AQUARA (SYN GA)	4.3	4.0	4.2
AZTEC	4.0	4.3	4.2
BEL 86-1	4.0	4.3	4.2
BEL 86-2	4.0	4.3	4.2
CROSSFIRE (PICK TF9)	4.0	4.3	4.2
GUARDIAN (PICK 845PN)	4.0	4.3	4.2
JAGUAR	4.0	4.3	4.2
OLYMPIC II (PST-5OL)	4.0	4.3	4.2
PACER	4.0	4.3	4.2
REBEL II	4.0	4.3	4.2
SHORTSTOP (PICK DDF)	4.0	4.3	4.2
WINCHESTER (PST-5F2)	4.0	4.3	4.2
APACHE	4.0	4.0	4.0
ARRIBA (PST-5DM)	4.0	4.0	4.0
AUSTIN (NORMARC 25)	4.0	4.0	4.0
BARNONE (BAR FA 7851)	4.0	4.0	4.0
CHIEFTAIN	4.0	4.0	4.0
ELDORADO (PST-5D1)	4.0	4.0	4.0
EMPEROR (PICK SLD)	4.0	4.0	4.0
FINELAWN I	4.0	4.0	4.0
JAGUAR II	4.0	4.0	4.0

SPRING GREENUP RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN

NAME	OK1	VA3	MEAN
PST-5EN	4.0	4.0	4.0
SAFARI (PST-5MW)	4.0	4.0	4.0
SHENANDOAH (PE-7E)	4.0	4.0	4.0
SILVERADO (PST-5BL)	4.0	4.0	4.0
TIP	4.0	4.0	4.0
TRIBUTE	3.7	4.3	4.0
TRIDENT	4.0	4.0	4.0
WRANGLER	4.0	4.0	4.0
CAREFREE	4.0	3.7	3.8
FATIMA	4.0	3.7	3.8
JB-2	4.0	3.7	3.8
MURIETTA (PST-5D7)	4.0	3.7	3.8
PHOENIX (NORMARC 77)	4.0	3.7	3.8
RICHMOND	4.0	3.7	3.8
TITAN	4.0	3.7	3.8
TRAILBLAZER	4.0	3.7	3.8
WILLAMETTE	3.7	4.0	3.8
ANTHEM (KWS-DUR)	4.0	3.3	3.7
MONARCH	4.0	3.3	3.7
TWILIGHT (KWS-BG-6)	3.7	3.7	3.7
LSL VALUE	0.3	1.3	0.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES,
SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER
THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 6. LEAF TEXTURE RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 1/

NAME	AR1	OH2	MEAN
AZTEC	7.0	4.0	5.5
TWILIGHT (KWS-BG-6)	7.0	4.0	5.5
SHENANDOAH (PE-7E)	6.7	3.7	5.2
VEGAS (NORMARC 99)	7.0	3.3	5.2
SHORTSTOP (PICK DDF)	6.0	4.3	5.2
CROSSFIRE (PICK TF9)	7.0	3.0	5.0
GUARDIAN (PICK 845PN)	5.7	4.0	4.8
HUBBARD 87	5.7	4.0	4.8
COCHISE (PICK 127)	6.0	3.7	4.8
TRADITION (PST-DBC)	6.0	3.7	4.8
ANTHEM (KWS-DUR)	5.7	3.7	4.7
BEL 86-2	6.0	3.3	4.7
MONARCH	6.0	3.3	4.7
CHIEFTAIN	5.3	4.0	4.7
BRAHMA (LEGEND)	5.7	3.3	4.5
MURIETTA (PST-5D7)	5.3	3.7	4.5
PST-5AG	5.3	3.7	4.5
PST-5EN	6.0	3.0	4.5
SILVERADO (PST-5BL)	5.7	3.3	4.5
TRIBUTE	5.7	3.3	4.5
AMIGO (PST-5HF)	5.7	3.0	4.3
ARRIBA (PST-5DM)	5.7	3.0	4.3
THOROUGHbred	5.7	3.0	4.3
WRANGLER	5.7	3.0	4.3
ELDORADO (PST-5D1)	5.3	3.3	4.3
JAGUAR II	5.0	3.7	4.3
TAURUS	5.0	3.7	4.3
AVANTI (PICK DM)	5.0	3.3	4.2
CAREFREE	4.7	3.7	4.2
OLYMPIC II (PST-5OL)	5.7	2.7	4.2
PE-7	4.7	3.7	4.2
APACHE	5.3	3.0	4.2
BONANZA	5.3	3.0	4.2
REBEL II	5.3	3.0	4.2
AQUARA (SYN GA)	5.3	2.7	4.0
AUSTIN (NORMARC 25)	5.0	3.0	4.0
MAVERICK II (PICK GH6)	5.0	3.0	4.0
MESA	5.0	3.0	4.0
OLYMPIC	5.0	3.0	4.0
SUNDANCE	5.0	3.0	4.0
TRIDENT	4.7	3.3	4.0
WINCHESTER (PST-5F2)	5.0	3.0	4.0
EMPEROR (PICK SLD)	4.7	3.0	3.8
FINELAWN 5GL	4.7	3.0	3.8
WILLAMETTE	4.7	3.0	3.8

LEAF TEXTURE RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE

NAME	AR1	OH2	MEAN
ADVENTURE	5.0	2.7	3.8
PHOENIX (NORMARC 77)	4.3	3.3	3.8
PST-5AP	5.0	2.7	3.8
TRAILBLAZER	4.3	3.3	3.8
FINELAWN I	4.7	2.7	3.7
JAGUAR	4.0	3.3	3.7
JB-2	4.7	2.7	3.7
PACER	4.7	2.7	3.7
REBEL	4.7	2.7	3.7
SAFARI (PST-5MW)	4.0	3.3	3.7
ARID	5.3	2.0	3.7
BARNONE (BAR FA 7851)	4.3	3.0	3.7
BEL 86-1	4.0	3.0	3.5
FATIMA	4.7	2.3	3.5
TITAN	4.7	2.3	3.5
CIMMARON	4.0	2.7	3.3
FALCON	4.0	2.7	3.3
RICHMOND	4.0	2.3	3.2
TIP	4.3	2.0	3.2
KY-31	3.3	2.3	2.8
LSL VALUE	1.4	1.0	0.9

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES,
SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER
THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 7. SPRING DENSITY RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 1/						
NAME	AR1	AZ1	CA1	MO3	OK1	MEAN
CROSSFIRE (PICK TF9)	7.3	7.7	8.0	7.7	5.7	7.3
GUARDIAN (PICK 845PN)	7.0	7.7	8.3	7.7	5.7	7.3
SHORTSTOP (PICK DDF)	7.0	7.7	8.0	8.0	5.3	7.2
ANTHEM (KWS-DUR)	6.7	7.7	8.0	7.7	5.3	7.1
PE-7	6.3	7.3	8.0	7.7	6.0	7.1
SHENANDOAH (PE-7E)	7.0	7.3	8.0	7.7	5.0	7.0
TWILIGHT (KWS-BG-6)	7.3	7.3	7.3	8.0	4.7	6.9
WRANGLER	6.7	7.0	8.0	7.3	5.7	6.9
VEGAS (NORMARC 99)	6.7	7.5	7.7	7.3	5.3	6.9
PST-5AG	6.7	7.3	7.7	6.7	6.0	6.9
THOROUGHbred	6.0	7.3	7.7	8.0	5.3	6.9
TAURUS	5.7	7.7	7.7	7.3	6.0	6.9
BEL 86-2	6.0	8.0	7.7	7.0	5.3	6.8
BONANZA	5.7	7.0	8.0	7.7	5.7	6.8
CAREFREE	6.0	7.3	8.0	7.0	5.7	6.8
HUBBARD 87	6.0	7.3	8.0	7.7	5.0	6.8
MESA	6.0	7.3	8.0	7.0	5.7	6.8
MONARCH	6.0	7.3	8.0	7.7	5.0	6.8
JAGUAR II	6.0	7.0	7.7	7.0	6.0	6.7
OLYMPIC II (PST-5OL)	6.3	7.0	7.7	7.7	5.0	6.7
AZTEC	5.7	8.0	8.0	7.3	4.7	6.7
PHOENIX (NORMARC 77)	5.3	7.3	8.0	7.7	5.3	6.7
SILVERADO (PST-5BL)	6.0	7.3	8.0	7.3	5.0	6.7
TRADITION (PST-DBC)	6.3	7.3	7.7	7.3	5.0	6.7
COCHISE (PICK 127)	6.7	7.3	7.7	7.3	4.3	6.7
TITAN	5.7	7.0	8.0	7.0	5.7	6.7
AUSTIN (NORMARC 25)	6.3	7.3	7.7	6.3	5.7	6.7
BEL 86-1	5.3	7.3	7.7	7.3	5.7	6.7
BRAHMA (LEGEND)	6.0	7.0	8.0	7.3	5.0	6.7
AMIGO (PST-5HF)	5.7	7.3	8.0	7.0	5.0	6.6
ELDORADO (PST-5D1)	5.3	7.0	8.0	7.3	5.3	6.6
JB-2	5.3	7.3	8.0	6.7	5.7	6.6
MAVERICK II (PICK GH6)	5.3	7.3	8.0	7.0	5.3	6.6
SUNDANCE	5.7	7.3	7.7	6.7	5.7	6.6
EMPEROR (PICK SLD)	5.7	7.0	7.7	7.0	5.3	6.5
FINELAWN 5GL	5.7	7.0	7.7	7.7	4.7	6.5
TRAILBLAZER	5.0	7.0	7.7	7.0	6.0	6.5
TRIBUTE	5.7	7.0	7.7	7.7	4.7	6.5
WINCHESTER (PST-5F2)	5.7	7.0	7.7	7.0	5.3	6.5
MURIETTA (PST-5D7)	5.7	7.3	7.7	6.3	5.7	6.5
SAFARI (PST-5MW)	4.7	7.3	8.0	7.3	5.3	6.5
CHIEFTAIN	5.7	7.0	7.7	7.0	5.0	6.5
TRIDENT	5.7	7.3	7.0	7.0	5.3	6.5
REBEL	6.0	7.0	7.3	6.3	5.7	6.5
APACHE	6.0	7.0	7.3	6.7	5.0	6.4

SPRING DENSITY RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY

NAME	AR1	AZ1	CA1	MO3	OK1	MEAN
ARRIBA (PST-5DM)	6.0	7.0	8.0	6.0	5.0	6.4
AVANTI (PICK DM)	5.3	7.0	8.0	7.0	4.7	6.4
ARID	5.7	7.0	7.3	6.7	5.0	6.3
BARNONE (BAR FA 7851)	5.3	7.3	7.7	6.7	4.7	6.3
CIMMARON	5.7	7.0	7.7	6.7	4.7	6.3
PACER	6.0	7.0	6.7	6.7	5.3	6.3
PST-5AP	6.0	7.0	7.0	6.0	5.7	6.3
FALCON	5.0	7.0	7.0	7.3	5.3	6.3
REBEL II	5.3	7.3	7.3	6.3	5.3	6.3
ADVENTURE	5.7	7.0	7.3	6.7	4.7	6.3
AQUARA (SYN GA)	5.7	7.0	6.7	6.7	5.3	6.3
FINELAWN I	5.7	7.0	7.3	7.0	4.3	6.3
OLYMPIC	5.7	7.0	7.0	6.3	5.3	6.3
WILLAMETTE	5.3	7.3	7.0	6.7	5.0	6.3
FATIMA	5.0	7.3	6.7	6.0	6.0	6.2
PST-5EN	6.0	7.0	.	6.3	5.0	6.1
JAGUAR	4.7	7.0	7.3	6.7	4.7	6.1
TIP	5.3	7.0	7.0	6.3	4.7	6.1
RICHMOND	4.7	7.0	5.7	6.0	5.0	5.7
KY-31	4.3	6.3	6.0	5.7	5.7	5.6
LSD VALUE	1.7	0.7	0.8	1.2	1.2	0.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES,
SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER
THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 8. SUMMER DENSITY RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 1/

NAME	AR1	CA1	MO3	MEAN
CROSSFIRE (PICK TF9)	7.7	7.7	6.7	7.3
SHENANDOAH (PE-7E)	7.0	7.3	6.7	7.0
SHORTSTOP (PICK DDF)	7.0	6.7	7.3	7.0
BEL 86-2	5.7	7.7	7.3	6.9
TRIBUTE	6.0	7.7	6.7	6.8
PST-5AG	6.3	7.3	6.7	6.8
AMIGO (PST-5HF)	6.0	7.3	6.7	6.7
GUARDIAN (PICK 845FN)	6.7	7.0	6.3	6.7
TWILIGHT (KWS-BG-6)	5.3	7.0	7.7	6.7
WRANGLER	5.7	8.0	6.3	6.7
ANTHEM (KWS-DUR)	6.3	7.0	6.3	6.6
HUBBARD 87	6.0	7.3	6.3	6.6
MONARCH	6.3	7.0	6.3	6.6
OLYMPIC II (PST-5OL)	6.3	7.3	6.0	6.6
SUNDANCE	6.3	6.3	7.0	6.6
VEGAS (NORMARC 99)	6.3	7.0	6.3	6.6
TRADITION (PST-DBC)	6.0	6.7	6.7	6.4
AZTEC	5.3	7.0	7.0	6.4
BEL 86-1	5.3	7.3	6.7	6.4
BRAHMA (LEGEND)	5.0	7.0	7.3	6.4
PST-5AP	6.7	6.3	6.3	6.4
SAFARI (PST-5MW)	5.0	7.3	7.0	6.4
WINCHESTER (PST-5F2)	5.7	7.3	6.3	6.4
ARRIBA (PST-5DM)	5.7	7.7	5.7	6.3
BONANZA	5.7	6.3	7.0	6.3
ELDORADO (PST-5D1)	5.3	7.0	6.7	6.3
MAVERICK II (PICK GH6)	5.3	6.7	7.0	6.3
REBEL II	5.0	7.3	6.7	6.3
TAURUS	6.0	6.7	6.3	6.3
THOROUGHBRED	5.7	7.0	6.3	6.3
AVANTI (PICK DM)	5.7	7.3	5.7	6.2
CIMMARON	5.3	6.7	6.7	6.2
JAGUAR II	5.7	6.7	6.3	6.2
MESA	5.0	7.0	6.7	6.2
PHOENIX (NORMARC 77)	5.7	7.0	6.0	6.2
SILVERADO (PST-5BL)	5.0	7.0	6.7	6.2
FATIMA	6.3	6.0	6.3	6.2
FINELAWN I	6.0	6.3	6.3	6.2
PE-7	5.3	7.3	6.0	6.2
WILLAMETTE	6.3	6.3	6.0	6.2
PST-5EN	5.7	.	6.7	6.2
CHIEFTAIN	6.0	6.7	5.7	6.1
MURIETTA (PST-5D7)	5.0	7.7	5.7	6.1
TITAN	6.0	6.7	5.7	6.1
APACHE	5.7	6.3	6.3	6.1

SUMMER DENSITY RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY

NAME	AR1	CA1	MO3	MEAN
AUSTIN (NORMARC 25)	5.0	7.0	6.3	6.1
ARID	5.3	6.7	6.0	6.0
BARNONE (BAR FA 7851)	5.3	7.0	5.7	6.0
EMPEROR (PICK SLD)	5.0	6.3	6.7	6.0
FINELAWN 5GL	5.3	6.3	6.3	6.0
JB-2	5.3	7.0	5.7	6.0
TRAILBLAZER	5.0	7.0	6.0	6.0
ADVENTURE	5.3	6.7	5.7	5.9
AQUARA (SYN GA)	5.7	6.0	6.0	5.9
REBEL	5.0	7.0	5.7	5.9
COCHISE (PICK 127)	5.0	6.3	6.3	5.9
JAGUAR	5.0	6.3	6.3	5.9
TRIDENT	5.7	6.0	5.7	5.8
TIP	6.0	6.0	5.3	5.8
CAREFREE	5.0	7.0	5.0	5.7
OLYMPIC	4.7	7.0	5.3	5.7
PACER	5.0	6.0	6.0	5.7
FALCON	4.7	6.0	5.3	5.3
KY-31	4.7	5.7	5.3	5.2
RICHMOND	5.0	5.7	5.0	5.2
LSD VALUE	1.7	0.9	1.3	0.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES,
SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCR WHEN THIS VALUE IS LARGER
THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 9. FALL DENSITY RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 1/

NAME	AR1	CA1	MO3	OK1	MEAN
CROSSFIRE (PICK TF9)	7.3	7.7	8.0	7.0	7.5
GUARDIAN (PICK 845PN)	6.3	7.7	7.7	7.0	7.2
VEGAS (NORMARC 99)	7.7	7.0	8.3	5.7	7.2
BEL 86-2	6.3	7.0	8.3	7.0	7.2
SHENANDOAH (PE-7E)	7.0	6.7	7.7	6.7	7.0
MURIETTA (PST-5D7)	5.0	8.0	7.7	6.7	6.8
OLYMPIC II (PST-5OL)	6.0	7.0	7.7	6.7	6.8
AMIGO (PST-5HF)	5.3	7.0	8.0	7.0	6.8
SHORTSTOP (PICK DDF)	6.3	6.7	8.0	6.3	6.8
WRANGLER	6.0	7.3	7.0	7.0	6.8
ELDORADO (PST-5D1)	6.0	6.7	8.0	6.3	6.8
PST-5AG	5.3	6.7	7.7	7.0	6.7
SAFARI (PST-5MW)	5.3	7.7	7.0	6.7	6.7
SILVERADO (PST-5BL)	6.0	6.0	7.7	7.0	6.7
TAURUS	5.0	7.7	7.3	6.7	6.7
TRADITION (PST-DBC)	6.0	6.7	6.7	7.3	6.7
BRAHMA (LEGEND)	4.7	7.3	7.7	6.7	6.6
CHIEFTAIN	5.7	6.7	7.0	7.0	6.6
EMPEROR (PICK SLD)	5.3	6.7	7.7	6.7	6.6
HUBBARD 87	5.0	6.7	7.7	7.0	6.6
MONARCH	5.7	6.7	8.0	6.0	6.6
ANTHEM (KWS-DUR)	5.3	7.0	8.3	5.7	6.6
APACHE	5.3	7.0	7.3	6.7	6.6
AVANTI (PICK DM)	5.7	7.0	7.3	6.3	6.6
PE-7	5.3	7.0	7.7	6.3	6.6
PST-5EN	6.0	.	7.3	6.3	6.6
BONANZA	4.7	7.0	7.7	6.7	6.5
MAVERICK II (PICK GH6)	5.3	7.0	7.0	6.7	6.5
PHOENIX (NORMARC 77)	5.0	7.0	7.3	6.7	6.5
TRIBUTE	5.0	7.0	7.7	6.3	6.5
ARRIBA (PST-5DM)	5.3	7.0	7.3	6.3	6.5
ARID	5.3	6.7	6.7	7.0	6.4
BEL 86-1	5.0	6.7	7.3	6.7	6.4
MESA	5.0	6.7	7.7	6.3	6.4
THOROUGHBRED	5.0	6.7	7.3	6.7	6.4
AZTEC	5.7	7.0	7.3	5.3	6.3
BARNONE (BAR FA 7851)	5.0	7.0	6.3	6.7	6.3
JAGUAR II	5.0	6.7	7.3	6.0	6.3
TRAILBLAZER	4.0	7.0	7.0	7.0	6.3
WINCHESTER (PST-5F2)	4.3	7.0	7.0	6.7	6.3
CAREFREE	5.0	7.3	6.3	6.3	6.3
AUSTIN (NORMARC 25)	5.3	6.3	6.3	6.7	6.2
OLYMPIC	4.7	7.0	6.3	6.7	6.2
REBEL	5.0	7.0	6.0	6.7	6.2
SUNDANCE	4.7	6.7	6.7	6.7	6.2

FALL DENSITY RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY

NAME	AR1	CA1	MO3	OK1	MEAN
TWILIGHT (KWS-BG-6)	5.0	6.7	7.0	6.0	6.2
JB-2	5.0	6.7	6.7	6.0	6.1
REBEL II	5.0	6.7	6.0	6.7	6.1
CIMMARON	4.7	6.0	7.3	6.3	6.1
PST-5AP	5.0	6.3	6.3	6.7	6.1
FINELAWN 5GL	4.7	6.7	6.0	6.7	6.0
COCHISE (PICK 127)	5.3	5.7	7.0	6.0	6.0
FINELAWN I	5.0	6.3	6.0	6.7	6.0
PACER	4.7	6.3	6.0	6.7	5.9
ADVENTURE	4.3	6.3	6.0	7.0	5.9
AQUARA (SYN GA)	5.0	5.7	6.0	6.7	5.8
FATIMA	5.0	5.7	5.7	7.0	5.8
JAGUAR	4.7	6.7	5.3	6.7	5.8
TRIDENT	4.7	6.0	6.0	6.7	5.8
TIP	5.3	6.3	5.0	6.7	5.8
TITAN	4.7	6.3	5.7	6.3	5.8
WILLAMETTE	4.7	6.7	5.3	6.3	5.8
FALCON	3.7	6.0	6.3	6.3	5.6
RICHMOND	4.0	6.3	5.0	6.3	5.4
KY-31	4.0	5.7	4.7	6.7	5.3
LSD VALUE	1.5	1.1	1.4	1.0	0.6

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES,
SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER
THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 10. PERCENT LIVING GROUND COVER (SUMMER)
 RATINGS OF TALL FESCUE CULTIVARS
 1991 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 1/

NAME	MO1	VA3	MEAN
PHOENIX (NORMARC 77)	75.0	98.3	86.7
SHENANDOAH (PE-7E)	75.0	97.7	86.3
ANTHEM (KWS-DUR)	73.3	98.7	86.0
TWILIGHT (KWS-BG-6)	73.3	97.0	85.2
FATIMA	70.0	99.0	84.5
COCHISE (PICK 127)	71.7	96.0	83.8
AMIGO (PST-5HF)	71.7	95.3	83.5
ELDORADO (PST-5D1)	70.0	96.3	83.2
CHIEFTAIN	68.3	97.0	82.7
BARNONE (BAR FA 7851)	66.7	98.3	82.5
JAGUAR	76.7	88.3	82.5
SUNDANCE	70.0	94.7	82.3
TRIBUTE	70.0	92.7	81.3
TRIDENT	65.0	97.7	81.3
AUSTIN (NORMARC 25)	73.3	88.7	81.0
FINELAWN I	66.7	95.3	81.0
PE-7	63.3	98.3	80.8
HUBBARD 87	70.0	91.3	80.7
PST-5AG	65.0	96.3	80.7
VEGAS (NORMARC 99)	70.0	91.3	80.7
AQUARA (SYN GA)	63.3	97.7	80.5
MURIETTA (PST-5D7)	66.7	94.3	80.5
FINELAWN 5GL	66.7	94.0	80.3
EMPEROR (PICK SLD)	63.3	97.3	80.3
MAVERICK II (PICK GH6)	63.3	97.3	80.3
OLYMPIC II (PST-5OL)	63.3	97.3	80.3
SHORTSTOP (PICK DDF)	63.3	97.3	80.3
OLYMPIC	65.0	95.0	80.0
THOROUGHBRED	61.7	97.7	79.7
WINCHESTER (PST-5F2)	68.3	90.7	79.5
KY-31	66.7	92.0	79.3
AVANTI (PICK DM)	70.0	88.3	79.2
AZTEC	63.3	94.7	79.0
TITAN	68.3	89.7	79.0
BONANZA	66.7	91.0	78.8
PST-5EN	66.7	91.0	78.8
SAFARI (PST-5MW)	63.3	94.3	78.8
CROSSFIRE (PICK TF9)	61.7	95.3	78.5
TAURUS	65.0	92.0	78.5
REBEL II	70.0	86.7	78.3
TRAILBLAZER	66.7	90.0	78.3
ARID	66.7	89.3	78.0
BEL 86-1	61.7	94.0	77.8
CAREFREE	70.0	85.0	77.5
MESA	68.3	86.7	77.5

PERCENT LIVING GROUND COVER (SUMMER)
 RATINGS OF TALL FESCUE CULTIVARS
 1991 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS

NAME	MO1	VA3	MEAN
GUARDIAN (PICK 845PN)	61.7	92.7	77.2
WILLAMETTE	63.3	91.0	77.2
MONARCH	60.0	94.3	77.2
RICHMOND	68.3	85.0	76.7
ARRIBA (PST-5DM)	60.0	93.0	76.5
ADVENTURE	58.3	94.3	76.3
BEL 86-2	63.3	89.3	76.3
SILVERADO (PST-5BL)	63.3	89.3	76.3
PST-5AP	70.0	81.7	75.8
FALCON	60.0	91.3	75.7
BRAHMA (LEGEND)	61.7	88.3	75.0
TIP	63.3	86.7	75.0
CIMMARON	61.7	87.7	74.7
REBEL	66.7	80.0	73.3
TRADITION (PST-DBC)	65.0	81.7	73.3
WRANGLER	65.0	81.7	73.3
APACHE	53.3	90.7	72.0
PACER	65.0	76.7	70.8
JAGUAR II	61.7	80.0	70.8
JB-2	61.7	80.0	70.8
LSD VALUE	12.1	11.9	8.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES,
 SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
 STATISTICAL DIFFERENCES OCCR WHEN THIS VALUE IS LARGER
 THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 11. BROWN PATCH RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 1/

NAME	IL2	VA6	MEAN
KY-31	7.3	9.0	8.2
ARID	7.3	8.7	8.0
SHORTSTOP (PICK DDF)	7.0	9.0	8.0
SHENANDOAH (PE-7E)	8.0	7.7	7.8
MAVERICK II (PICK GH6)	7.0	8.3	7.7
FATIMA	6.7	8.3	7.5
GUARDIAN (PICK 845PN)	6.7	8.3	7.5
JAGUAR	6.7	8.3	7.5
COCHISE (PICK 127)	7.0	7.7	7.3
REBEL II	6.3	8.3	7.3
ADVENTURE	6.0	8.3	7.2
FINELAWN I	7.0	7.3	7.2
VEGAS (NORMARC 99)	6.3	8.0	7.2
AUSTIN (NORMARC 25)	.	7.0	7.0
EMPEROR (PICK SLD)	6.7	7.3	7.0
FALCON	7.0	7.0	7.0
RICHMOND	6.3	7.7	7.0
ARRIBA (PST-5DM)	5.7	8.0	6.8
BRAHMA (LEGEND)	6.0	7.7	6.8
JB-2	6.7	7.0	6.8
TITAN	5.3	8.3	6.8
BARNONE (BAR FA 7851)	.	6.7	6.7
MESA	5.7	7.7	6.7
TRIDENT	5.7	7.7	6.7
PE-7	6.0	7.3	6.7
CROSSFIRE (PICK TF9)	5.3	7.7	6.5
ELDORADO (PST-5D1)	5.3	7.7	6.5
PACER	5.3	7.7	6.5
PST-5AP	5.3	7.7	6.5
PST-5EN	4.7	8.3	6.5
OLYMPIC II (PST-5OL)	5.0	7.7	6.3
WILLAMETTE	5.7	7.0	6.3
CAREFREE	6.3	6.3	6.3
TAURUS	5.3	7.3	6.3
AQUARA (SYN GA)	6.0	6.3	6.2
CIMMARON	5.0	7.3	6.2
MONARCH	5.0	7.3	6.2
REBEL	6.3	6.0	6.2
TRIBUTE	4.3	8.0	6.2
ANTHEM (KWS-DUR)	5.3	6.7	6.0
BEL 86-2	5.0	7.0	6.0
PHOENIX (NORMARC 77)	4.7	7.3	6.0
SAFARI (PST-5MW)	4.0	8.0	6.0
SUNDANCE	3.3	8.7	6.0
TIP	4.0	8.0	6.0

BROWN PATCH RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE

NAME	IL2	VA6	MEAN
TWILIGHT (KWS-BG-6)	.	6.0	6.0
WINCHESTER (PST-5F2)	5.0	7.0	6.0
AMIGO (PST-5HF)	5.0	6.7	5.8
APACHE	4.0	7.7	5.8
WRANGLER	4.3	7.3	5.8
OLYMPIC	3.7	7.7	5.7
AVANTI (PICK DM)	3.7	7.3	5.5
AZTEC	4.0	7.0	5.5
BEL 86-1	5.3	5.7	5.5
PST-5AG	4.7	6.3	5.5
SILVERADO (PST-5BL)	4.0	7.0	5.5
TRADITION (PST-DBC)	4.7	6.3	5.5
FINELAWN 5GL	3.0	7.7	5.3
THOROUGHbred	4.0	6.7	5.3
JAGUAR II	4.3	6.3	5.3
CHIEFTAIN	3.0	7.3	5.2
HUBBARD 87	4.0	6.3	5.2
BONANZA	2.7	7.3	5.0
MURIETTA (PST-5D7)	3.3	6.3	4.8
TRAILBLAZER	3.3	5.7	4.5
LSL VALUE	3.1	1.9	1.9

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES,
SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER
THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

TABLE 12. VERTICAL GROWTH RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

VERTICAL GROWTH RATINGS 1-9; 9=LEAST GROWTH 1/

NAME	OH2	MEAN
AZTEC	5.3	5.3
CHIEFTAIN	5.3	5.3
GUARDIAN (PICK 845PN)	5.3	5.3
TRAILBLAZER	5.3	5.3
AQUARA (SYN GA)	5.0	5.0
OLYMPIC II (PST-5OL)	5.0	5.0
PHOENIX (NORMARC 77)	5.0	5.0
SILVERADO (PST-5BL)	5.0	5.0
VEGAS (NORMARC 99)	5.0	5.0
ANTHEM (KWS-DUR)	4.7	4.7
BARNONE (BAR FA 7851)	4.7	4.7
ELDORADO (PST-5D1)	4.7	4.7
EMPEROR (PICK SLD)	4.7	4.7
FALCON	4.7	4.7
JAGUAR II	4.7	4.7
MONARCH	4.7	4.7
REBEL	4.7	4.7
SHORTSTOP (PICK DDF)	4.7	4.7
THOROUGHbred	4.7	4.7
TWILIGHT (KWS-BG-6)	4.7	4.7
WINCHESTER (PST-5F2)	4.7	4.7
ADVENTURE	4.3	4.3
AMIGO (PST-5HF)	4.3	4.3
BEL 86-1	4.3	4.3
BONANZA	4.3	4.3
CAREFREE	4.3	4.3
COCHISE (PICK 127)	4.3	4.3
JAGUAR	4.3	4.3
MAVERICK II (PICK GH6)	4.3	4.3
PE-7	4.3	4.3
RICHMOND	4.3	4.3
TRIBUTE	4.3	4.3
TRIDENT	4.3	4.3
WRANGLER	4.3	4.3
ARID	4.0	4.0
BRAHMA (LEGEND)	4.0	4.0
CROSSFIRE (PICK TF9)	4.0	4.0
FINELAWN I	4.0	4.0
JB-2	4.0	4.0
MURIETTA (PST-5D7)	4.0	4.0
OLYMPIC	4.0	4.0
PST-5AG	4.0	4.0
PST-5AP	4.0	4.0
REBEL II	4.0	4.0
SAFARI (PST-5MW)	4.0	4.0

VERTICAL GROWTH RATINGS OF TALL FESCUE CULTIVARS
1991 DATA

VERTICAL GROWTH RATINGS 1-9; 9=LEAST GROWTH

NAME	OH2	MEAN
TIP	4.0	4.0
TRADITION (PST-DBC)	4.0	4.0
WILLAMETTE	4.0	4.0
APACHE	3.7	3.7
AUSTIN (NORMARC 25)	3.7	3.7
BEL 86-2	3.7	3.7
CIMMARON	3.7	3.7
FATIMA	3.7	3.7
FINELAWN 5GL	3.7	3.7
HUBBARD 87	3.7	3.7
PACER	3.7	3.7
PST-5EN	3.7	3.7
SHENANDOAH (PE-7E)	3.7	3.7
SUNDANCE	3.7	3.7
TITAN	3.7	3.7
ARRIBA (PST-5DM)	3.3	3.3
AVANTI (PICK DM)	3.0	3.0
KY-31	3.0	3.0
MESA	3.0	3.0
TAURUS	3.0	3.0
LSD VALUE	1.9	1.9

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES,
SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER
THAN THE CORRESPONDING LSD VALUE (LSD 0.05).