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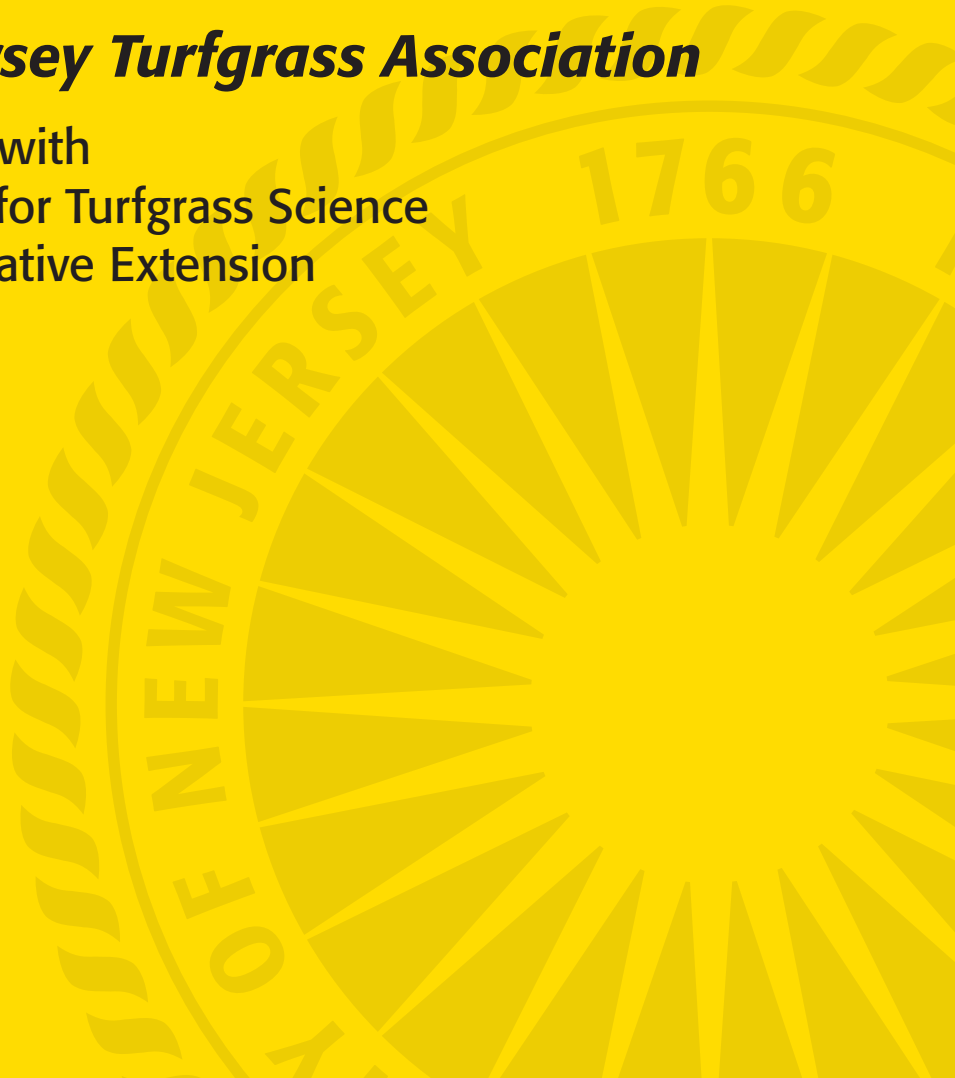

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The Rutgers Turfgrass Proceedings is published yearly by the Rutgers Center for Turfgrass Science, Rutgers Cooperative Extension, and the New Jersey Agricultural Experiment Station, School of Environmental and Biological Sciences, Rutgers, The State University of New Jersey in cooperation with the New Jersey Turfgrass Association. The purpose of this document is to provide a forum for the dissemination of information and the exchange of ideas and knowledge. The proceedings provide turfgrass managers, research scientists, extension specialists, and industry personnel with opportunities to communicate with co-workers. Through this forum, these professionals also reach a more general audience, which includes the public.

This publication includes lecture notes of papers presented at the 2008 New Jersey Turfgrass Expo. Publication of these lectures provides a readily available source of information covering a wide range of topics and includes technical and popular presentations of importance to the turfgrass industry.

This proceedings also includes research papers that contain original research findings and reviews of selected subjects in turfgrass science. These papers are presented primarily to facilitate the timely dissemination of original turfgrass research for use by the turfgrass industry.

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Dr. Ann Brooks Gould, Editor
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RESPONSE OF KENTUCKY BLUEGRASS AND TALL FESCUE TO TRAFFIC STRESSES IN 2008

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Increased use of sports fields and other recreational sites presents a difficult challenge for turfgrass managers responsible for maintaining uniform and safe, natural playing surfaces. By establishing traffic stress tolerant cultivars of Kentucky bluegrass (*Poa pratensis* L.) and tall fescue (*Festuca arundinacea Schreb*.), as well as mixtures of the two species, sports field managers can help to maximize the safety and playability of sports fields.

Kentucky bluegrass is frequently established on lawns, parks, cemeteries, institutional grounds, and other comparable general purpose lawn areas. The vigorous rhizome development of this turfgrass makes it well-adapted for use on sports fields and other heavily trafficked surfaces (Beard, 1973). Puhalla et al. (1999) notes that Kentucky bluegrass is one of the most commonly used turfgrass species in sports fields grown in cool season climates.

Tall fescue is well adapted to the transition zone and is suited to large, expansive lawn areas and parks where a uniform wear-resistant cover is important (Juska et al., 1969). However, early cultivars of this species had a coarse leaf texture, formed turfgrass stands with very low shoot density, and did not blend well with other commonly used cool-season turfgrasses. These attributes discouraged turfgrass managers from establishing tall fescue in areas where a high quality turf is desired (Beard, 1973). Since the release of the cultivar Rebel in 1979 (Funk et al., 1981), turfgrass breeders have continued to improve the turfgrass quality of tall fescue by producing cultivars with a darker color, finer leaf texture, lower growth habit, denser turf canopy, and increased resistance to disease. The result is that these new tall fescue cultivars can be used for lawns, parks, and sports fields without compromising turfgrass quality (Bokmeyer et al., 2008).

Excessive foot traffic on cool-season turfgrasses established at recreational sites can lead to major damage (Carrow and Petrovic, 1992), particularly when these sites are used as athletic fields. Minner et al. (1993) notes that traffic is the most frequent and damaging stress of turfgrasses used as a sports turf. Beard (1973) described four separate stresses as components of traffic: wear, soil compaction, divoting, and soil displacement. Wear injury affects aboveground plant parts and is defined as the immediate result of the crushing, tearing, and shearing actions of foot and vehicular traffic. Soil compaction results in chronic stresses associated with increased soil bulk density, loss of soil structure, and reduced aeration, water infiltration, and water storage (Beard et al. 1974; Shearman, 1988). Soil displacement and divoting often contribute to a decline in the quality of sports field surfaces; these stresses, however, have not been well researched.

Since the 1960s, many wear and traffic simulators have been developed (Bonos et al., 2001; Canaway, 1976; Cockerham and Brinkman, 1989; Henderson et al., 2005; Shearman et al., 1974; Youngner, 1961). Most simulators mimic trampling, which imparts wear as well as soil compaction, whereas others are designed to impart only wear stress. These simulators have been used in studies that evaluate the traffic tolerance of turfgrass species and mixtures (Canaway, 1981; Cockerham and Brinkman, 1989; Fushtey et al., 1982; Minner et al., 1993; Taivalmaa et al., 1998) as well as cultivars within a particular species (Minner et al., 1993; Park et al., 2004; Park et al., 2005; Park et al., 2008; Wood and Lwa, 1972).

For example, several studies have assessed the overall wear tolerance of newer Kentucky bluegrass cultivars (Brosnan et. al, 2005; Park et. al, 2005).

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Carrow (1980) noted that tall fescue cover declined with an increase in soil compaction and that perennial ryegrass (*Lolium perenne* L.) and Kentucky bluegrass were more tolerant of compaction than tall fescue. Park et al. (2004) identified numerous cultivars and selections in the 2001 NTEP Tall Fescue Test that had improved tolerance to simulated wear and compaction applied in 2002 and 2003. In addition, the 2001 NTEP Tall Fescue Test was assessed under traffic stresses using the traffic simulator described by Cockerham and Brinkman (1989) in Michigan (Bughrara, 2007). Recently, Park et al. (2009) reported wear tolerant entries in the 2005 Cooperative Turfgrass Breeders Test Tall Fescue Trial[1] and the 2006 NTEP Tall Fescue Test.

Although overall wear tolerance of Kentucky bluegrass and tall fescue turfs has been studied, the impact of seasonally applied wear has not received much attention. Of note, Park et al. (2007, 2008) evaluated the impact of fall- and summer-applied wear on cultivars and selections in the 2005 National Turfgrass Evaluation Program (NTEP) Kentucky Bluegrass Test. Park et al. (2008) also reported on the fall traffic tolerance of tall fescue cultivars and selections in the 2006 NTEP Tall Fescue Test. Since Kentucky bluegrass and tall fescue cultivar recommendations are needed for sports fields that receive play at a specific time of the year (spring, summer, or fall), the objective of this study was to assess the responses of Kentucky bluegrass and tall fescue to traffic stresses applied seasonally.

MATERIALS AND METHODS

Kentucky Bluegrass Wear Tolerance and Recovery Trial

Entries of the 2005 NTEP Kentucky bluegrass trial, established in September 2005, were evaluated for wear tolerance and recovery during April through June 2008 (spring) and November 2008 (fall). Also included in the test were the following cultivars and experimental selections: Princeton 105, A00-99, Midnight II, A93-201, A99-3122, A97-1560, A96-1368, A99-2427, A99-523, A99-2377, and A03-66.

Wear was previously applied to this test in October 2006 (Park et al., 2007) and July 2007 (Park et al., 2008). The test was conducted on a well-drained Nixon loam (44% sand, 41% silt, 15% clay) at the Horticultural Research Farm II in North Brunswick, NJ. Individual plot size was 9 x 5 ft. Soil test results from July 2008 indicated that the soil pH was 5.7, soil phosphorous (P) was 270 lb/acre, and soil potassium (K) was 302 lb/acre. The test was mowed 2 to 3 times per week with a reel mower at a height of 1.5 inches and was irrigated as necessary to avoid drought stress. Annual nitrogen (N) applications for 2008 totaled 3.4 lb/1000 ft^2. Annual K_2O applied to the test area was 1.8 lb/1000 ft^2. Based on soil test results, lime (CCE=100) was applied at a rate of 18.5 lb/1000 ft^2 in November 2008 after fall wear. Mesotrione (Tenacity Herbicide) was applied to the test at 0.14 lb/acre (Tenacity Herbicide @ 8.0 oz/acre) on 24 September and 14 October 2009 for selective pre- and post-emergence control of annual bluegrass (*Poa annua* L.). The experimental design was a randomized complete block design with three replications.

The wear simulator used in this study was a modified version of the M24C5A Sweepster described by Bonos et al. (2001). The simulator was operated at a ground speed of 2.5 mph and 250 rpm for the paddle-axle. Spring wear treatments were applied on 22, 23, and 24 April 2008 to the 1/3rd portion of each plot that received wear in October 2006 and July 2007. Six passes were made on each of the three application dates for a total of 18 passes. Fall wear was applied on 3, 4, and 5 November 2008 to the 1/3rd portion of each plot that received wear in October 2006, July 2007, and April 2008. Thirty-six passes were made (9 passes on 3 November; 18 passes on 4 November; and 9 passes on 5 November). In each case, every other pass was made in the opposing direction of the previous pass.

The section of each plot that received wear treatments was rated for percent (fullness) turfgrass canopy (C) before the initiation of spring and fall wear (C_{BW}) using a 0 to 100% scale, where 0 represented the absence of a turfgrass canopy and 100% equaled a full canopy. The percent canopy during spring wear was rated after 6 (C_{+6}), 12 (C_{+12}), and 18 (C_W) passes of the wear simulator to assess wear tolerance. Percent canopy was also rated at 6 (C_{6DAW}), 20 (C_{20DAW}), and 40 (C_{40DAW}) days after wear (DAW) to assess turfgrass recovery. Percent turfgrass canopy (C) during fall wear was rated after 18 (C_{+18}) and 36 (C_W) passes of the wear simula-

[1]http://www.ctbt-us.info/

tor. Turfgrass quality after wear was also visually assessed on a 1 to 9 scale (where 9 represented the fullest turfgrass canopy and most uniform ground cover after wear) on 7 November 2008 (2 days after 36 passes of the wear simulator). Recovery was evaluated as percent canopy at 9 (C_{9DAW}) and 19 (C_{19DAW}) days after wear (DAW).

The portion of each plot that did not receive a wear treatment was rated throughout the growing season for visual turf quality (i.e., overall appearance, turf color, uniformity, density, mowing quality, reduced rate of vertical growth, leaf texture, and damage due to insects and diseases). Spring green-up, seedhead development, susceptibility to summer patch (caused by *Magnaporthe poae* Landschoot & Jackson), and sensitivity to mesotrione were also rated as separate characteristics. A 1 to 9 scale was utilized for all ratings, where 9 represented the best turf characteristic.

Tall Fescue Traffic Tolerance and Recovery Trial

In 2008, plots of tall fescue were evaluated for recovery from traffic applied in the fall of 2007 (Park et al., 2008) as well as tolerance to and recovery from wear and compaction (traffic) applied in July 2008. Included in the study were the 113 entries of the 2006 NTEP Tall Fescue Trial, the selections CE-2, CE-4, BBM, Titanium, and ATE, and the commercially-available tall fescue blends Pennington's Best (Forte [33%], Prospect [33%], Signia [33%], and inert matter [1%]) and Water Saver (Labarinth (RTF) tall fescue [34%], Aztec II [24%], Focus [20%], Rendition [20%], and inert matter [2%]).

Plots (6 x 5 ft) were established in September 2006 on a well-drained loam (33% sand, 41% silt, 26% clay) at the Horticultural Research Farm II in North Brunswick, NJ. Soil tests from July 2008 indicated that the soil pH was 5.8, soil P was 93 lb/acre, and soil K was 438 lb/acre. The test was mowed 1 to 2 times a week with a rotary mower at a height of 2.75 inches. The test was irrigated as necessary to avoid drought stress. Annual N applied for 2008 totaled 3.3 lb/1000 ft^2. Lime (CCE=100) was applied at 25.5 lb/1000 ft^2 in November 2008. The experimental design was a randomized complete block design with three replications.

Wear was applied using the simulator discussed previously. In 2008, a total of 16 passes of the simulator were applied over 2 days (8 passes on 22 July and 23 July) to one-half of each plot. Every other pass was made in the opposing direction of the previous pass and was made to the same one-half of each plot that received traffic in fall 2007. To compact the soil, 10 passes of a vibratory pavement roller (2586 lb operating weight and centrifugal force with vibratory function engaged to equal 3000 lb) were applied on 4 August 2008 to the same portion of the plots that had received wear. Every other pass of the roller was made in the opposing direction of the previous pass.

To assess recovery from traffic applied during the fall of 2007, the percent turfgrass canopy (C) was assessed visually on 8 May and 4 June 2008 (211 [C_{211DAC}] and 238 [C_{238DAC}] days after compaction [DAC], respectively).

To assess tolerance to wear applied during the summer of 2008 (22 and 23 July), percent (fullness) turfgrass canopy was assessed before wear (C_{BW}) and after 8 (C_{+8}) and 16 (C_W) passes of the wear simulator. Turfgrass quality after wear was visually assessed on 25 July 2008 using a 1 to 9 scale where 9 represented the fullest turfgrass canopy and most uniform ground cover after traffic.

To assess tolerance to traffic (compaction after wear) applied in 2008, percent (fullness) of turfgrass canopy was also rated 12 days after wear (C_{12DAW}) and 9 (C_{9DAC}), 18 (C_{18DAC}), 30 (C_{30DAC}), and 60 (C_{60DAC}) days after compaction. Turfgrass quality after traffic was rated on a 1 to 9 scale (where 9 represented the fullest turfgrass canopy and most uniform ground cover after traffic) on 13 August 2008.

The portion of each plot that did not receive wear was rated throughout the growing season for visual turf quality (i.e., overall appearance, turf color, uniformity, density, mowing quality, reduced rate of vertical growth, leaf texture, and damage due to insects and diseases). Spring green-up and susceptibility to brown patch (caused by *Rhizoctonia solani* Kühn) were also rated as separate characteristics in 2008. A 1 to 9 scale was utilized for all ratings, where 9 equaled the best turf characteristic.

Statistical Analysis

All data in both trials were subjected to analysis of variance and means were separated using the Fisher's protected least significant difference (LSD) test at $p < 0.05$.

RESULTS AND DISCUSSION

Kentucky Bluegrass

Non-wear Assessment of Kentucky bluegrass. Kentucky bluegrass cultivars and selections with the best turfgrass quality (2006, 2007, 2008, and the 2006-2008 average) were Midnight II, Nu Destiny, Sudden Impact, Excursion, Impact, J-1466, Award, Solar Eclipse, Everglade, Midnight, NA-3248, Ginney II, Everest, Granite, and Alexa II (Table 1). Entries with the best turfgrass quality in 2008 were Bd 03-84, Skye, A99-523, Blueberry, NuGlade, A97-1560, Emblem, J-2502, Bluestone, Princeton 105, A00-247, Rhythm, Barrister, Nuchicago, and A99-2559 (Table 1).

The poorest turf quality in 2006, 2007, 2008, and for the 2006-2008 average was exhibited by Kenblue (Table 1). Other entries that displayed poor turfgrass quality (rating less than 5.0) in 2006, 2007, 2008, and for the 2006-2008 average were PSG 366, DP 76-9081, Aviator, Reveille, BAR VV 9634, Baron, BAR VV 8536, Corsair, BAR VV 9630, and DLF 76-9075 (Table 1).

Entries that greened up earliest in the spring (rated on 3 April 2008) were BAR VV 0709, POPR 04594, Mystere, NA-3248, and H94-305 (Table 2). By comparison, BAR VV 0709, Mystere, and H94-305 were among the earliest to green up when evaluated on 10 April 2006 (Park et al., 2007) and 24 April 2007 (Park et al., 2008). Twenty-nine cultivars and selections had the poorest spring green-up in 2008 (Table 2). Among these, 14 were classified by Shortell et al. (2005) as Compact-Midnight Type cultivars and included Impact, Barrister, Rugby II, Excursion, Nu Destiny, NuGlade, Everest, Midnight, Beyond, Award, Midnight II, Everglade, Bluestone, and Rhythm (Shortell et al., 2005). Compact-Midnight Type cultivars are characterized by long winter dormancy and a purple and/or straw coloration during prolonged dormant periods (Bonos et al., 2004).

Seedhead formation, assessed on 21 May 2008, was greatest for the cultivar Bandera (Table 2). Alternatively, seedhead production was unacceptable (seedheads < 6.0) for Bd 99-2103, Baron, and A99-2377 (Table 2). Baron is classified as a BVMG (Baron, Victa, Merit, and Gnome) Type; seedhead formation and stemminess is a common characteristic of cultivars within this type (Bonos et al., 2004).

Cultivars and experimental selections most severely affected by summer patch (rated on 22 July 2008) were 4-Season, Prosperity, CPP 821, Harmonie, CP 76-9068, NA-3257, Moonlight SLT, and CPP 822 (Table 2). Other susceptible entries (disease rating < 7.0) included A98-948, STR 2485, Volt, Shamrock, POPR 04594, A96-1368, Hampton, Kenblue, Starburst, Juliet, Argos, Julia, BAR VV 0665, DP 76-9066, Yankee, RAD-504, PST-1A1-899, and Dynamo (Table 2). Of the 95 entries least affected by summer patch (rated on 22 July 2008), BAR VV 9630, A00-99, Belissimo, MSP 3723, A99-3119, DLF 76-9075, Excursion, Nu Destiny, Alexa II, and J-1466 were symptom free (disease rating = 9.0) in all three replications of this study (Table 2).

Differences in drought stress were increasingly apparent in late summer 2008. The most drought stress sensitive entries on 4 September 2008 were Aviator, Rhythm, Bariris, Hampton, PST-1A1-899, CPP 821, NA-3257, CPP 822, J-1466, Beyond, Princeton 105, CP 76-9068, Bandera, Dynamo, Avid, DP 76-9066, 4-Season, Harmonie, Moonlight SLT, and Julia (Table 2). By comparison, Harmonie and CP 76-9068 were the most sensitive to drought stress in 2007 (Park et al., 2008). Park et al. (2008) reported that Bariris, CPP 821, CPP 822, Dynamo, DP 76-9066, and Julia were also sensitive to drought stress (stress rating < 6.0) in 2007.

Of the 41 entries least susceptible to drought stress on 4 September 2008, 25 were experimental selections (Table 2). Those entries rated at 7.0 and higher were MSP 3724, BAR VV 9630, BAR VV 0709, BAR VV 9634, A00-99, Belissimo, MSP 3723, A99-3119, 1QG-38, A99-523, Blue Note, DLF 76-9075, A99-2559, A00-247, H94-305, STR 2553, Bd 98-2108, and Kenblue (Table 2).

Entry response to mesotrione was assessed on 3 October 2008 (9 days after treatment [DAT]) and 3 November 2008 (40 days after initial treatment [DAIT]). No entries were seriously damaged by mesotrione; however, some herbicide-sensitive entries appeared discolored (bleached). The most sensitive entry on both rating dates was SW AG 514 (Table 2). Other sensitive (rating < 6.0) entries at 9 DAT and/or 40 DAIT included NA-3248, BAR VV 8536, A98-689, CPP 822, 4-Season, Gaelic, CP 76-9068, Harmonie, Dynamo, CPP 821, H98-701, Washington, RAD-343, and DP 76-9081 (Table 2). Cultivars that were least sensitive to mesotrione on 9 DAT and 40 DAIT were Everglade, Alexa II, Ginney

II, Sudden Impact, Nu Destiny, Granite, Excursion, Everest, Midnight, Blueberry, Blue Note, Yankee, Zinfandel, Impact, Nuchicago, Prosperity, Mystere, Bluestone, Midnight II, Barrister, NuGlade, Hampton, Award, Rhythm, Princeton 105, Emblem, Avid, Solar Eclipse, Beyond, Starburst, Corsair, Rugby II, Moonlight SLT, and Diva (Table 2).

Assessment of Kentucky Bluegrass Subjected to Spring Wear. Percent (fullness) turfgrass canopy rated on 25 April 2008 after 16 passes of the wear simulator (C_W) was greatest for Julia, CPP 822, NA-3248, A99-523, CP 76-9068, BAR VV 0709, A00-99, POPR 04594, CPP 821, Bariris, A96-1368, and MSP 3723 (Table 3). In previous tests, the entries CP 76-9068, Julia, CPP 821, Bariris, and CPP 822 also maintained a greater C_w during fall 2006 and summer 2007 (Park et al., 2007; Park et al., 2008). Rapid recovery of the turfgrass canopy due to early spring green-up probably influenced C_W in spring 2008, as NA-3248, BAR VV 0709, and POPR 04594 were also among the entries with the best spring green-up on 3 April 2008 (Table 2).

Low C_W (< 27%) was observed in April 2008 for 43 entries, which included Excursion, Everglade, Award, Reveille, Kenblue, Argos, Everest, Granite, Rhythm, Zinfandel, 4-Season, Juliet, Bluestone, Alexa II, Ginney II, Nuchicago, Midnight II, Bewitched, Baron, Yankee, Bandera, Glenmont, Solar Eclipse, Dynamo, Hampton, Beyond, and Avid (Table 3). The low C_w exhibited by Excursion, Everglade, Award, Everest, Rhythm, Bluestone, Midnight II, and Beyond, identified as Compact-Midnight Type cultivars by Shortell et al. (2005), can be attributed to the poor spring green-up (lack of spring canopy development) characteristic of cultivars within this type (Bonos et al., 2004). Among the entries with poor C_W in this test, Zinfandel, H98-701, PSG 366, A01-299, A95-410, and DLF 76-9075 also performed poorly following summer 2007 wear (Park et al., 2008), and DLF 76-9075 received a low rating following wear applied during spring 2008, summer 2007, and fall 2006 (Park et al., 2007).

Compact-Midnight Type cultivars recovered well from wear applied in spring 2008. Entries with low recovery 20 days after wear (C_{20DAW} rated on 14 May 2008) included Dynamo, Bandera, Avid, Zinfandel, DP 76-9081, H98-701, Hampton, A00-1400, DLF 76-9075, Glenmont, A01-299, and SW AG 514 (Table 3). Award (Compact-Midnight Type) and J-1466 exhibited very good recovery (C_{20DAW}) on 14 May 2008, yet these entries were among cultivars and selections with the lowest C_W assessed on 25 April 2008 (Table 3).

Recovery for turfgrass evaluated 40 days after wear (C_{40DAW} rated on 3 June 2008) was greater than 80% for 40 entries assessed (Table 3). Those with the greatest recovery (C_{40DAW}) were CPP 822, CP 76-9068, Harmonie, Julia, CPP 821, NA-3248, and Bariris; the poorest performing entry was A01-299. The 46 entries with less than 75% C_{40DAW} included Belissimo, Shamrock, Rhythm, Juliet, Hampton, Dynamo, Mystere, Arrowhead, Yankee, Corsair, Shiraz, America, Bluestone, Bandera, Volt, Avid, Reveille, Zinfandel, Glenmont, and Kenblue (Table 3).

Assessment of Kentucky Bluegrass Subjected to Fall Wear. Percent canopy (C_W) on 5 November 2008 was greatest for Harmonie, CP 76-9068, Emblem, CPP 822, CPP 821, and Bariris (Table 4). These entries also ranked among the best turf quality (based on a 1 to 9 scale) assessed after wear on 7 November 2008 and included BAR VV 0709, Solar Eclipse, Sudden Impact, NA-3257, Nu Destiny, and Everglade (Table 4).

Entries exhibiting the lowest C_W on 5 November 2008 as well as the poorest turf quality after wear based on the 1 to 9 scale on 7 November 2008 were A98-689, MSP 3724, RAD-0AN64, RAD-504, Moonlight SLT, Zinfandel, 1QG-38, BAR VK 0710, Avid, AKB449, A99-2427, Wild Horse, SPTR 2959, Aviator, MSP 3722, PST-109-752, Bd 98-2108, A97-1560, A00-1254, Belissimo, Pinot, A00-99, A99-3122, Glenmont, Bd 99-2103, Hampton, H94-305, Gaelic, MSP 3723, A01-299, A99-2377, Arrowhead, Bandera, PSG 366, A03-66, Volt, Dynamo, PSG 711, America, A00-1400, Mystere, Kenblue, DLF 76-9075, A95-410, DP 76-9081, and H98-701 (Table 4).

Entries with the greatest recovery from fall applied wear (C_{19DAW} rated on 24 November 2008) were CP 76-9068, BAR VV 0709, Harmonie, CPP 822, NA-3257, and NA-3248 (Table 4). Entries with the poorest C_{19DAW} were RAD-0AN64, MSP 3722, Zinfandel, A00-1254, BAR VK 0710, A99-3122, A98-689, Bd 98-2108, PSG 711, Shiraz, 1QG-38, Arrowhead, Argos, AKB449, H94-305, A01-299, Pinot, America, Mystere, Aviator, PST-109-752, Dynamo, Kenblue, Bd 99-2103, Hampton, Volt, Bandera, H98-701, Glenmont, A00-1400, PSG 366, DLF 76-9075, A95-410, and DP 76-9081 (Table 4).

Percent canopy (C_{19DAW}) for certain entries was often lower than C_W rated on 5 November 2008 (Table 4). This reduction in canopy without additional wear may have been a result of canopy bruising resulting from wear applied 3 though 5 November 2008, which desiccated the canopy in the days after wear. Only 38 entries had greater percent canopy (C_{19DAW}) on 24 November 2008 compared to C_W (5 November 2008). These entries that exhibited late fall growth and recovery included Avid, Wild Horse, Belissimo, Princeton 105, Kenblue, Gaelic, Mystere, Diva, Arrowhead, Blue Note, Moonlight SLT, Dynamo, Bandera, and Juliet (Table 4).

Tall fescue

Non-traffic Assessment of Tall Fescue. Tall fescue cultivars and selections with the greatest average turfgrass quality in 2007, 2008, and for the 2007-2008 average included Bullseye, RKCL, DP 50-9440, RK 5, Firecracker LS, Turbo, NA-BT-1, Falcon V, Wolfpack II, TG 50-9460, Monet, and Hemi (Table 5). Entries in the top ranking for turfgrass quality in 2008 included Speedway, RK 6, Rhambler SRP, Mustang 4, IS-TF-159, K06-WA, 3rd Millennium SRP, Firenza, DP 50-9407, and Finelawn Xpress.

The entry with the poorest performance in 2007, 2008, and for the 2007-08 average was Kentucky 31 (Table 5). Poor turfgrass quality exhibited by Kentucky 31 has been widely reported in other research trials (Bokmeyer et al., 2008; Park et al., 2004; Park et al., 2008). Other entries that did not rate well (rating less than 5.0) were BAR Fa 6363, Biltmore, GO-1BFD, Magellan, Lindbergh, Plato, PSG-RNDR, Aristotle, PSG-TTST, Water Saver, Pennington's Best, Silverado, and STR-8GRQR (Table 5).

Entries with better green-up on 9 April 2008 included Kentucky 31, Rembrandt, GO-1BFD, TG 50-9460, Van Gogh, and Traverse SPR (Table 6). In a previous test, Kentucky 31, Rembrandt, and GO-1BFD also had the earliest spring green-up in April 2007 (Park et al., 2008). Twenty-four entries with the poorest spring green-up in 2008 included Jamboree, Fat Cat, Darlington, Pennington's Best, Raptor II, Tahoe II, and Toccoa (Table 6).

Brown patch rated on 30 June, 8 and 21 July, and 19 September 2008 was least troublesome for 48 entries including Wolfpack II, Mustang 4, Aggressor, Speedway, Turbo, Firenza, Bullseye, SR 8650, Falcon V, Rhambler SRP, Monet, Shenandoah III, Escalade, Talladega, Jamboree, Raptor II, 3rd Millennium SRP, Titanium, Rocket, Toccoa, Finelawn Xpress, Fat Cat, Turbo Rz, Tahoe II, Firecracker LS, Hemi, Silverado, and Essential (Table 6). Entries more susceptible to brown patch included Einstein, BGR-TF2, 312, AST 7003, ATF 1328, AST-2, DP 50-9411, KZ-2, Col-M, NA-SS, IS-TF-138, KZ-1, RNP and PSG-RNDR (Table 6).

Assessment of Tall Fescue Recovery from Traffic Applied Fall 2007. Cultivars with the greatest recovery from traffic assessed on 8 May and 4 June 2008 (C_{211DAC} and C_{238DAC}, respectively) were Falcon V, Mustang 4, Shenandoah III, Biltmore, Traverse SPR, Titanium LS, Aggressor, Escalade, Finelawn Xpress, SR 8650, Firenza, Hemi, Falcon IV, Van Gogh, Turbo, Monet, Rebel IV, Padre, and Speedway (Table 7). Entries that performed poorly included DP 50-9407, IS-TF-135, and Toccoa (Table 7).

The encroachment of annual bluegrass into tall fescue plots treated with traffic in fall 2007 was least for 70 entries including the following cultivars: Aggressor, Talladega, Rocket, Firecracker LS, Titanium LS, Lindbergh, Rembrandt, Monet, Raptor II, Titanium, Van Gogh, Hemi, Essential, Falcon NG, Traverse SPR, Cezanne Rz, Wolfpack II, Mustang 4, Speedway, Firenza, Shenandoah III, Escalade, Jamboree, 3rd Millennium SRP, Finelawn Xpress, Fat Cat, Biltmore, Water Saver, Magellan, Padre, Plato, Spyder LS, Einstein, Falcon V, Rebel IV, and Falcon IV (Table 7). Entries with the greatest ingress of annual bluegrass on 27 May 2008 were Toccoa, LS-11, KZ-1, LS-03, AST-2, LS-06, BGR-TF2, and AST-1 (Table 7).

Assessment of Tall Fescue Response to Traffic During Summer 2008. Entries with the greatest percent turfgrass canopy (C_W rated on July 23) and turfgrass quality after wear (1 to 9 rating scale) on July 25 were Falcon V, Bullseye, RK 6, Jamboree, Falcon NG, Shenandoah III, Talladega, Hemi, NA-BT-1, SC-1, Wolfpack II, RK 5, TG 50-9460, Turbo, IS-TF-138, Raptor II, BGR-TF1, Aggressor, CE-2, Speedway, PSG-85QR, SR 8650, Traverse SPR, ATE, K06-WA, Finelawn Xpress, Mustang 4, JT-42, DP 50-9440, RK 4, Van Gogh, Firenza, DP 50-9407, Monet, Rebel IV, and RKCL (Table 8). Among these entries, Park et al. (2008) reported that Bullseye, RK 6, Shenandoah III (SH 3), Talladega (RP 3), Hemi, SC-1, Turbo, Aggressor (IS-TF-153), Traverse SPR (RK-1), K06-WA, Finelawn Xpress (RP 2), RK 4, Firenza, and Monet had the greatest percent turfgrass canopy after 24 wear passes applied in October 2007.

Tall fescue entries with the lowest C_W in 2008 were PSG-TTST, ATF 1328, and Kentucky 31 (Table 8). Entries with the poorest turfgrass quality after wear (1 to 9 rating scale) were 06-WALK, GE-1, 312, Pennington's Best, Einstein, RNP, AST-2, Water Saver, DKS, GWTF, Tulsa Time, J-130, Rembrandt, KZ-2, Plato, Silverado, Col-J, AST 7001, ATF 1247, AST 7003, Hunter, AST-1, Aristotle, PSG-TTST, ATF 1328, and Kentucky 31 (Table 8).

Entries that recovered best from summer wear (C_{12DAW}) included Falcon V, Shenandoah III, Wolfpack II, SR 8650, Speedway, Turbo, Falcon NG, Raptor II, Mustang 4, Bullseye, Jamboree, Talladega, Hemi, Aggressor, Traverse SPR, Titanium, Monet, Firenza, Spyder LS, Finelawn Xpress, Firecracker LS, 3rd Millennium SRP, Rocket, Rebel IV, Titanium LS, Cezanne Rz, Skyline, Van Gogh, Rhambler SRP, Essential, Turbo Rz, and Biltmore (Table 8). Entries with the poorest recovery (C_{12DAW}) were AST 7002, BAR Fa 6363, GWTF, Rembrandt, KZ-2, Plato, AST 7001, AST 7003, Hunter, AST-1, AST-2, DKS, Col-J, J-130, PSG-TTST, Aristotle, ATF 1328, and Kentucky 31 (Table 8).

Analysis of variance performed on percent canopy data after traffic (wear and compaction) revealed a non-significant entry effect for C_{9DAC}, C_{18DAC}, and C_{30DAC}. However, the entry effect was significant for turfgrass quality after traffic (1-9 rating scale) on 13 August 2008 and percent canopy (C_{60DAC}) at 60 days after compaction; hence, only data from these rating dates are presented (Table 8).

On 13 August 2008, 76 entries had the best turfgrass quality after traffic (1-9 rating scale) including Falcon V, Wolfpack II, Falcon NG, Raptor II, SR 8650, Monet, Titanium, Hemi, Jamboree, Speedway, Mustang 4, Talladega, Aggressor, Finelawn Xpress, Firenza, Rebel IV, Escalade, Shenandoah III, Essential, Traverse SPR, Cezanne Rz, Biltmore, Turbo, Bullseye, Van Gogh, Toccoa, Skyline, Spyder LS, Turbo Rz, 3rd Millennium SRP, Titanium LS, Justice, Tahoe II, Lindbergh, Rhambler SRP, Rocket, Fat Cat, Magellan, and Water Saver (blend) (Table 8). Among these cultivars, Falcon V, Wolfpack II, Falcon NG, SR 8650, Monet, Titanium, Hemi, Mustang 4, Talladega, Aggressor, Finelawn Xpress, Firenza, Rebel IV, Escalade, Shenandoah III, Essential, Traverse SPR, Biltmore, Turbo, Bullseye, and Spyder LS rated well (C_{22DAC}) after traffic was applied during fall 2007 (Table 7). Cultivars with the poorest turfgrass quality after traffic on 13 August included Firecracker LS, Darlington, Pennington's Best (blend), Falcon IV, Plato, Rembrandt, Aristotle, Padre, Silverado, Hunter, Einstein, Tulsa Time, and Kentucky 31 (Table 8).

Tall fescue entries with the greatest recovery (C_{60DAC}) included Turbo, Falcon V, Bullseye, Talladega, Shenandoah III, Raptor II, Monet, Jamboree, Speedway, Aggressor, Van Gogh, Firecracker LS, SR 8650, Tahoe II, Mustang 4, Escalade, Essential, Traverse SPR, Rhambler SRP, Wolfpack II, Falcon NG, Hemi, Firenza, and 3rd Millennium SRP (Table 8). Entries with the poorest C_{60DAC} were Water Saver, BAR Fa 6363, Toccoa, Pennington's Best, Plato, Silverado, PSG-TTST, Aristotle, ATF 1328, and Kentucky 31 (Table 8).

CONCLUSIONS

Differences were observed among Kentucky bluegrass and tall fescue cultivars and selections for percent (fullness) turfgrass canopy after simulated wear stress was applied in 2008. Kentucky bluegrass entries including Julia, CPP 822, CP 76-9068, CPP 821, and Bariris exhibited excellent wear tolerance across seasons. Some of these entries, such as Julia, CPP 822, CP 76-9068, and CPP 821, are highly susceptible to summer patch and sensitive to drought stress. Thus, turf managers must also consider drought stress and summer patch data as part of the cultivar selection process for Kentucky bluegrass.

The assessment of tall fescue under traffic stresses in 2007 and 2008 has identified cultivars and experimental selections with improved traffic tolerance. In addition to traffic tolerance, susceptibility to brown patch is an important evaluation criterion, particularly for those sports field managers managing tall fescue surfaces with limited budgets (that is, an inability to apply fungicides). Falcon V, Wolfpack II, SR 8650, Monet, Titanium, Hemi, Mustang 4, Talladega, Aggressor, Finelawn Xpress, Firenza, Escalade, Shenandoah III, Essential, Turbo, and Bullseye performed better under traffic stresses applied in fall 2007 and summer 2008 and were also less susceptible to brown patch.

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Table 1. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2005 at North Brunswick, NJ. (Includes all entries of the 2005 National Kentucky Bluegrass Test - NTEP.)

		Turf Quality[1]										
	Cultivar or Selection	2006-2008 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2008 April	2008 May	2008 June	2008 July	2008 Aug.	2008 Sept.	2008 Oct.
1	Midnight II	7.7	7.7	8.1	7.4	1.3	8.0	9.0	8.3	8.3	8.7	8.3
2	Nu Destiny	7.5	7.4	7.9	7.3	2.0	7.7	9.0	8.7	7.3	8.0	8.3
3	Excursion	7.5	7.6	7.7	7.3	2.0	8.0	8.3	8.7	8.0	8.0	8.3
4	Sudden Impact (J-2870)	7.5	7.5	7.7	7.2	1.3	7.0	9.0	8.0	8.7	8.7	8.0
5	Midnight	7.4	7.5	7.3	7.4	1.7	8.7	8.7	8.3	7.3	8.7	8.3
6	Impact	7.3	7.3	7.6	7.0	1.7	8.3	9.0	7.7	6.7	7.7	8.0
7	Everglade	7.2	7.1	7.4	7.2	1.0	8.0	9.0	8.0	8.3	7.7	8.3
8	NA-3248	7.2	7.0	7.3	7.5	7.0	7.3	7.0	8.7	7.3	7.0	8.0
9	J-1466	7.2	7.1	7.5	7.0	1.3	7.3	8.3	9.0	7.7	7.0	8.0
10	Everest	7.2	7.6	7.1	7.0	1.3	6.7	8.0	8.7	8.0	7.7	8.7
11	Award	7.2	7.1	7.5	7.1	1.0	8.0	9.0	7.7	7.7	7.3	8.7
12	Alexa II (J-2404)	7.1	7.1	7.0	7.3	1.3	7.0	8.7	9.0	9.0	7.7	8.7
13	Granite (J-1326)	7.1	7.3	7.0	6.9	1.3	7.0	7.7	7.7	8.0	8.3	8.7
14	Solar Eclipse (J-2399)	7.1	7.2	7.4	6.7	1.0	8.0	9.0	7.7	7.3	7.0	7.0
15	Ginney II (J-2024)	7.1	7.0	7.1	7.0	1.7	8.3	8.7	7.3	7.7	7.3	8.0
16	Beyond	6.9	7.3	7.4	6.2	1.3	6.0	7.7	8.0	6.7	6.7	7.0
17	Bd 03-84	6.9	6.2	7.3	7.1	7.0	7.7	6.7	6.0	6.3	8.0	8.3
18	Blueberry	6.8	6.9	6.6	6.8	3.3	7.3	7.7	7.0	7.3	6.7	8.0
19	Bluestone	6.7	6.8	6.5	6.5	1.3	7.3	7.7	7.7	7.0	6.7	8.0
20	A99-523	6.7	6.4	6.8	6.8	6.7	7.0	7.0	5.3	6.0	8.0	7.3
21	Nuchicago (J-1334)	6.6	6.7	6.8	6.4	1.7	7.7	7.7	7.3	7.0	6.3	7.0
22	J-2502	6.5	6.5	6.6	6.5	1.7	6.3	8.0	7.3	7.0	7.3	8.0
23	MSP 3723	6.5	6.7	6.6	6.2	6.7	6.3	6.0	5.3	5.3	7.3	6.3
24	Skye	6.5	5.8	6.9	6.8	4.7	6.7	7.3	7.3	6.0	8.0	7.3
25	Barrister	6.5	6.1	7.0	6.4	1.3	7.0	7.7	8.7	6.0	7.0	7.0

(Continued)

Table 1 (continued).

	Cultivar or Selection	Turf Quality[1] 2006-2008 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2008 April	2008 May	2008 June	2008 July	2008 Aug.	2008 Sept.	2008 Oct.
26	NuGlade	6.5	5.9	6.8	6.7	2.0	6.7	8.3	8.3	6.7	7.3	7.7
27	A97-1560	6.5	6.0	6.7	6.7	7.0	6.7	7.0	6.3	6.3	6.3	7.3
28	Rhythm	6.4	6.4	6.6	6.4	1.3	7.3	8.3	8.3	6.3	6.0	7.0
29	Prosperity	6.4	6.6	7.1	5.5	2.0	8.7	7.3	4.3	4.7	5.0	6.3
30	J-3429	6.3	6.5	6.5	5.9	4.3	6.7	6.7	6.0	4.7	6.3	7.0
31	Bd 98-2108	6.3	6.3	6.4	6.1	5.0	7.7	7.3	5.7	4.0	6.3	6.7
32	Emblem (PST-Y2K-169)	6.3	5.5	6.7	6.6	1.7	7.3	8.0	7.3	7.3	6.7	8.0
33	POPR 04594	6.3	6.3	6.5	5.9	6.7	5.3	5.7	5.3	5.7	7.0	5.7
34	A99-2559	6.2	6.0	6.4	6.4	5.3	5.7	6.7	6.7	6.0	7.0	7.0
35	Princeton 105	6.2	5.7	6.6	6.4	3.3	7.3	8.0	6.3	6.0	7.0	7.0
36	Diva	6.2	6.2	6.6	5.8	5.0	6.7	6.7	5.7	4.3	6.0	6.3
37	A96-1368	6.2	6.3	6.0	6.3	6.3	6.0	6.3	5.7	6.7	7.7	5.7
38	Bd 99-2103	6.2	6.2	5.9	6.3	5.3	6.0	6.7	6.7	6.0	6.3	7.3
39	MSP 3724	6.2	6.4	6.0	6.1	6.0	6.7	6.0	5.7	5.3	6.0	7.0
40	Starburst (STR 2703)	6.2	5.9	6.5	6.1	6.7	5.7	7.0	5.3	5.3	6.0	6.7
41	Hampton (Bd 03-159)	6.1	7.1	5.3	6.0	4.0	6.3	8.0	6.0	5.7	5.3	6.7
42	Rugby II	6.1	5.3	6.7	6.3	1.7	6.7	8.0	7.7	6.0	7.3	6.7
43	A99-2427	6.1	5.8	6.2	6.3	3.7	6.3	7.7	6.0	5.7	7.3	7.0
44	PST-1A1-899	6.1	6.0	6.6	5.7	5.7	6.7	7.3	4.7	5.0	5.3	5.0
45	A00-99	6.1	6.2	6.1	6.1	6.3	5.7	6.3	5.3	5.7	7.7	5.7
46	Bewitched	6.1	6.7	5.6	5.9	1.3	6.7	6.3	6.0	7.3	6.7	7.0
47	A00-1400	6.1	6.7	6.1	5.5	3.3	7.3	7.3	5.0	5.0	4.3	6.0
48	Belissimo	6.1	6.4	5.9	5.9	6.0	6.3	5.3	5.0	5.3	6.3	6.7
49	NA-3257	6.0	6.4	6.5	5.0	5.3	6.3	6.0	2.7	4.0	4.3	6.3
50	Washington	6.0	5.8	6.3	6.0	6.3	6.0	6.0	7.0	6.0	6.0	4.3

(Continued)

Table 1 (continued).

	Cultivar or Selection	Turf Quality[1] 2006-2008 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2008 April	2008 May	2008 June	2008 July	2008 Aug.	2008 Sept.	2008 Oct.
51	Argos	6.0	6.1	6.3	5.4	4.3	6.7	6.3	5.3	4.0	5.3	6.3
52	Touche (STR 23180)	6.0	5.6	6.3	6.1	4.7	5.7	5.7	6.3	6.0	6.7	7.3
53	SPTR 2959	6.0	6.1	6.0	5.9	4.3	5.7	5.7	5.7	6.0	7.0	6.7
54	SW AG 514	5.9	6.1	5.9	5.9	1.3	3.3	6.7	7.0	8.0	8.7	6.0
55	Blue Note (A01-349)	5.9	5.8	5.7	6.1	5.0	5.7	5.3	5.7	6.7	7.3	7.0
56	A97-1287	5.8	5.4	5.9	6.2	6.0	6.7	6.0	5.0	6.0	7.3	6.7
57	A00-247	5.8	5.8	5.2	6.4	6.3	7.3	6.3	5.3	5.7	7.3	6.7
58	RAD-343	5.8	6.2	5.9	5.3	5.7	5.0	5.3	5.3	5.3	5.7	5.0
59	Shiraz (LTP-73)	5.8	5.7	5.9	5.8	5.0	6.0	6.0	5.7	4.7	6.3	7.0
60	Yankee (NA-3271)	5.7	6.0	6.1	5.1	2.3	6.3	5.3	3.7	5.7	5.7	6.7
61	A03-66	5.7	5.7	5.6	5.9	4.7	6.0	6.7	5.7	4.7	6.7	7.0
62	A95-410	5.7	6.4	5.7	5.0	2.7	4.7	6.3	5.0	4.7	5.7	5.7
63	STR 2553	5.7	5.7	5.9	5.5	5.0	6.3	5.3	4.3	4.7	6.0	7.0
64	A00-1254	5.7	5.4	5.5	6.0	6.0	6.7	6.7	5.3	5.3	6.7	5.7
65	PST-109-752	5.7	5.2	6.3	5.4	4.0	6.3	6.7	5.7	4.7	5.0	5.7
66	Bariris	5.7	5.8	6.1	5.1	4.0	6.0	6.7	5.7	5.3	4.3	4.0
67	Juliet (Bd 95-1930)	5.6	5.8	6.1	5.1	5.3	6.0	6.0	5.0	5.0	4.0	4.3
68	CPP 822	5.6	6.3	5.5	5.1	6.0	7.3	5.3	2.0	3.7	5.0	6.0
69	CP 76-9068	5.6	6.7	5.2	5.0	4.7	7.0	6.7	2.7	3.7	4.7	5.3
70	4-Season (J-2791)	5.6	5.9	6.3	4.7	3.3	7.7	7.3	3.0	3.3	3.7	4.7
71	1QG-38	5.6	6.1	5.6	5.1	5.7	5.7	5.3	5.0	5.0	5.0	4.3
72	A99-2377	5.6	6.1	4.9	5.9	5.3	6.0	7.0	6.0	4.3	6.3	6.3
73	MSP 3722	5.5	5.7	5.3	5.5	4.3	6.0	5.7	6.3	4.7	6.0	5.3
74	RAD-762	5.5	5.4	5.6	5.6	5.7	5.3	5.7	6.0	5.0	5.3	6.0
75	AKB449	5.5	6.1	5.3	5.2	2.0	6.7	6.0	5.0	4.7	6.0	6.0

(Continued)

Table 1 (continued).

	Cultivar or Selection	Turf Quality[1] 2006-2008 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2008 April	2008 May	2008 June	2008 July	2008 Aug.	2008 Sept.	2008 Oct.
76	Julia	5.5	6.2	6.1	4.1	5.3	6.0	6.0	4.7	3.3	1.7	2.0
77	CPP 821	5.5	5.8	5.7	4.9	4.7	7.0	6.0	3.0	3.7	5.3	4.7
78	Mystere	5.5	5.2	5.5	5.8	7.0	6.0	5.7	5.3	4.7	5.7	6.0
79	A93-201	5.5	5.9	4.9	5.6	5.7	5.0	6.3	5.7	5.0	6.0	5.7
80	Arrowhead (NA-3261)	5.5	4.9	5.9	5.6	4.3	6.3	6.7	5.0	5.3	5.0	7.0
81	STR 2485	5.5	5.8	5.5	5.2	4.0	5.7	5.7	5.3	5.7	4.7	5.0
82	PSG 711	5.5	5.3	5.5	5.6	5.7	6.0	6.0	6.3	4.7	5.3	5.3
83	Wild Horse (A97-890)	5.4	5.7	5.1	5.4	5.0	5.0	6.0	5.0	5.0	6.3	5.3
84	H94-305	5.4	5.2	6.0	5.0	7.0	4.7	5.0	5.3	4.7	4.3	4.0
85	Gaelic (Bd 98-1358)	5.4	5.8	5.1	5.1	5.7	4.7	5.0	4.7	4.7	5.3	5.7
86	DP 76-9066	5.4	5.9	5.8	4.4	3.0	6.0	7.3	3.7	2.7	3.3	5.0
87	A99-3119	5.4	5.5	5.1	5.4	5.0	6.0	4.7	5.3	5.3	6.3	5.3
88	A98-948	5.3	5.5	5.1	5.5	5.3	6.7	5.0	4.7	4.0	6.0	6.7
89	RAD-504	5.3	5.2	5.7	4.9	4.7	5.3	6.7	3.7	4.0	5.0	5.0
90	America	5.3	5.4	5.1	5.4	4.7	6.7	5.3	6.0	4.7	5.7	4.7
91	Shamrock	5.3	5.4	5.3	5.2	3.7	4.7	6.3	5.7	5.3	5.3	5.0
92	Glenmont	5.3	5.6	4.9	5.2	4.0	5.0	5.7	5.3	4.7	5.7	6.0
93	BAR VV 0665	5.2	5.4	5.5	4.7	4.3	5.3	6.7	5.0	3.7	4.0	3.7
94	CPP 817	5.2	5.5	5.2	4.9	5.3	5.0	5.0	4.0	3.7	5.3	5.7
95	Harmonie	5.2	6.1	5.1	4.3	3.7	7.3	6.3	2.7	3.3	3.0	4.0
96	Avid	5.2	5.8	5.0	4.8	2.7	6.7	6.0	5.3	4.3	3.7	4.7
97	Moonlight SLT (PST-101-390)	5.2	6.3	5.7	3.5	2.7	5.0	5.7	2.0	3.0	3.0	3.3
98	A98-689	5.1	5.6	4.9	5.0	3.7	5.0	6.0	5.3	4.7	5.3	5.0
99	A99-3122	5.0	4.3	5.5	5.3	5.0	6.0	6.7	4.7	4.0	5.0	6.0
100	BAR VV 0709	5.0	4.4	5.7	4.9	4.7	2.3	3.3	6.0	5.7	6.3	6.0

(Continued)

Table 1 (continued).

	Cultivar or Selection	Turf Quality[1] 2006-2008 Avg.	2006 Avg.	2007 Avg.	2008 Avg.	2008 April	2008 May	2008 June	2008 July	2008 Aug.	2008 Sept.	2008 Oct.
101	RAD-0AN64	5.0	4.9	5.3	4.6	3.7	5.3	5.7	4.7	3.7	4.3	5.0
102	Pinot (LTP-149)	4.9	4.9	5.0	4.9	3.7	5.7	5.3	5.0	4.7	5.3	4.7
103	PST-101-73	4.9	5.3	4.7	4.8	4.7	5.3	4.3	4.7	4.7	5.0	4.7
104	BAR VK 0710	4.8	4.9	4.4	5.1	4.7	5.3	5.3	6.3	5.7	5.0	3.7
105	Volt (A98-999)	4.8	5.3	4.5	4.6	5.0	4.3	4.7	4.0	4.0	5.3	5.3
106	PSG 366	4.7	4.7	4.7	4.7	4.0	5.3	5.0	5.0	4.0	4.3	5.3
107	Bandera (SPTR 2LM95)	4.7	4.8	5.1	4.3	1.0	5.3	5.3	5.7	4.3	4.0	4.3
108	Dynamo	4.7	4.6	5.1	4.3	2.3	5.0	6.3	4.3	3.3	4.0	4.7
109	H98-701	4.7	5.1	4.5	4.5	3.3	6.0	5.0	5.3	4.0	4.3	3.3
110	Zinfandel (LTP 2949)	4.6	5.3	3.6	5.0	4.0	6.0	5.7	5.7	4.0	4.3	5.3
111	BAR VV 9634	4.6	4.8	4.4	4.7	4.3	5.0	4.3	4.7	4.7	4.7	5.0
112	Aviator (NA-3259)	4.5	4.5	4.5	4.5	3.0	6.0	5.0	5.3	4.3	4.0	4.0
113	A01-299	4.5	5.2	4.1	4.2	3.0	4.7	4.7	4.0	4.0	3.7	5.3
114	BAR VV 9630	4.5	4.5	4.0	4.9	4.7	4.3	4.3	4.7	5.3	5.3	5.7
115	BAR VV 8536	4.5	4.3	4.2	4.9	4.0	3.7	4.3	5.3	5.3	5.7	6.0
116	Corsair (NA-3249)	4.4	4.6	4.1	4.6	2.3	5.3	6.0	4.7	4.0	4.3	5.3
117	Baron	4.4	4.6	4.2	4.6	2.3	4.7	5.7	5.7	4.0	4.7	5.0
118	DP 76-9081	4.3	4.6	4.5	3.6	2.7	2.7	3.3	4.7	3.7	4.7	3.7
119	Reveille	4.2	3.2	4.5	4.9	4.0	5.0	5.3	4.7	4.3	5.0	5.7
120	DLF 76-9075	3.6	3.3	3.3	4.2	4.3	4.0	5.0	3.7	3.7	4.7	4.3
121	Kenblue	3.1	3.1	3.1	3.0	3.0	3.0	3.3	2.3	2.7	2.3	4.3
	LSD at 5% =	0.8	1.0	1.1	1.1	1.7	1.7	1.5	2.2	1.7	2.5	2.0

[1]9 = best turf quality

Table 2. Evaluation of spring green-up, seedheads, and injury due to summer patch, drought stress, and mesotrione on Kentucky bluegrass cultivars and selections in a turf trial seeded in September 2005 at North Brunswick, NJ. (Includes all entries of the 2005 National Turfgrass Evaluation Program Kentucky Bluegrass Test - NTEP.)

	Cultivar or Selection	Spring Green-up[1] April 3 2008	Seed-heads[2] May 21 2008	Summer Patch[3] July 22 2008	Drought Stress[4] Sept. 4 2008	Mesotrione -------- Injury[5]-------- 9 DAT[6] Oct. 3 2008	40 DAIT[7] Nov. 13 2008
1	BAR VV 0709	9.0	9.0	8.0	8.0	9.0	6.7
2	Mystere	8.0	9.0	8.3	6.7	8.7	8.7
3	NA-3248	8.0	9.0	7.7	5.7	5.7	7.3
4	POPR 04594	8.0	9.0	6.3	5.7	7.7	6.3
5	H94-305	7.7	9.0	7.7	7.0	8.0	6.3
6	A97-1287	7.0	9.0	8.3	5.0	8.0	8.7
7	Kenblue	7.0	8.0	6.0	7.0	7.3	7.3
8	BAR VV 9630	6.7	9.0	9.0	8.0	8.0	7.7
9	A99-2559	6.7	9.0	8.7	7.0	8.7	8.7
10	Washington	6.7	9.0	8.0	5.7	7.0	5.7
11	A96-1368	6.7	9.0	6.3	4.0	6.7	6.0
12	Bd 03-84	6.7	8.7	8.7	5.7	7.3	9.0
13	A99-523	6.3	9.0	8.3	7.3	7.7	7.0
14	RAD-762	6.3	9.0	7.0	6.3	7.0	6.7
15	DP 76-9081	6.3	8.7	7.7	6.0	7.3	5.3
16	MSP 3724	6.3	8.3	8.0	8.3	7.0	6.3
17	Belissimo	6.3	8.0	9.0	7.3	7.7	6.0
18	A00-99	6.3	7.3	9.0	7.3	7.7	6.3
19	RAD-504	6.3	6.7	5.0	6.0	8.0	8.3
20	BAR VK 0710	6.0	9.0	7.7	5.7	6.7	6.7
21	RAD-343	6.0	9.0	7.3	5.3	7.0	5.7
22	A98-948	6.0	9.0	6.7	6.0	7.3	7.3
23	A93-201	6.0	8.7	8.0	4.0	6.3	8.7
24	Starburst (STR 2703)	6.0	8.7	6.0	6.7	8.3	8.3
25	A97-1560	6.0	8.3	8.7	6.3	8.0	7.0
26	STR 2553	6.0	7.7	7.7	7.0	7.7	6.3
27	Wild Horse (A97-890)	6.0	7.3	7.3	6.0	6.0	8.0
28	A00-247	5.7	9.0	8.7	7.0	8.0	8.0
29	CPP 817	5.7	9.0	8.0	5.7	8.7	7.7
30	Touche (STR 23180)	5.7	9.0	7.7	6.0	7.3	7.3
31	Shiraz (LTP-73)	5.7	9.0	7.7	6.0	6.7	7.0
32	PSG 711	5.7	9.0	7.7	5.3	8.3	6.0
33	STR 2485	5.7	9.0	6.7	5.7	6.3	7.3
34	Skye	5.7	8.7	8.3	6.0	7.3	8.3
35	A00-1254	5.7	8.7	7.7	6.7	8.3	8.0

(Continued)

Table 2 (continued).

	Cultivar or Selection	Spring Green-up[1] April 3 2008	Seed-heads[2] May 21 2008	Summer Patch[3] July 22 2008	Drought Stress[4] Sept. 4 2008	Mesotrione -------- Injury[5]-------- 9 DAT[6] Oct. 3 2008	40 DAIT[7] Nov. 13 2008
36	Juliet (Bd 95-1930)	5.7	8.3	6.0	5.7	6.3	6.3
37	PST-101-73	5.7	8.0	8.7	6.3	7.0	6.7
38	Bd 98-2108	5.7	8.0	7.0	7.0	6.7	8.3
39	Gaelic (Bd 98-1358)	5.7	8.0	7.0	4.7	5.3	7.7
40	MSP 3723	5.7	7.3	9.0	7.3	7.7	7.0
41	Diva	5.3	9.0	7.7	4.3	8.3	7.7
42	Julia	5.3	9.0	5.7	1.3	7.7	6.3
43	CPP 822	5.3	9.0	2.0	3.7	5.7	6.3
44	1QG-38	5.3	8.7	8.7	7.3	8.0	6.7
45	America	5.3	8.7	7.7	6.0	6.7	6.0
46	Reveille	5.3	7.7	8.0	6.0	7.3	7.7
47	BAR VV 9634	5.0	9.0	8.0	8.0	7.0	7.0
48	PST-1A1-899	5.0	9.0	4.7	3.7	6.7	7.7
49	A99-3119	5.0	8.7	9.0	7.3	7.3	6.7
50	Volt (A98-999)	5.0	8.7	6.7	5.7	6.7	8.0
51	A99-3122	5.0	8.3	7.7	4.0	7.0	8.3
52	A99-2377	5.0	5.0	8.0	4.3	7.3	8.7
53	Blue Note (A01-349)	4.7	9.0	8.3	7.3	8.3	9.0
54	SPTR 2959	4.7	9.0	7.7	6.3	6.3	8.7
55	PST-109-752	4.7	9.0	7.0	4.0	7.3	7.7
56	BAR VV 0665	4.7	9.0	5.7	4.0	7.7	6.0
57	A03-66	4.7	8.0	8.0	6.3	8.0	8.3
58	MSP 3722	4.7	8.0	8.0	5.7	8.0	8.0
59	A98-689	4.7	8.0	7.7	4.7	5.7	6.7
60	NA-3257	4.7	7.7	2.7	3.7	8.7	8.0
61	Pinot (LTP-149)	4.3	9.0	8.0	4.7	7.7	7.0
62	Argos	4.3	9.0	6.0	4.3	7.3	8.3
63	DLF 76-9075	4.3	8.3	9.0	7.0	7.3	8.0
64	RAD-0AN64	4.3	8.3	7.7	4.3	7.7	7.3
65	H98-701	4.3	7.3	8.7	5.0	7.7	5.7
66	Arrowhead (NA-3261)	4.3	7.3	7.7	5.7	7.3	8.3
67	BAR VV 8536	4.3	6.3	7.7	5.0	5.7	6.7
68	Bd 99-2103	4.3	5.3	8.7	5.3	6.0	9.0
69	J-3429	4.0	9.0	7.3	4.3	8.3	8.7
70	Bariris	4.0	9.0	7.0	3.7	8.0	6.7

(Continued)

Table 2 (continued).

	Cultivar or Selection	Spring Green-up[1] April 3 2008	Seed-heads[2] May 21 2008	Summer Patch[3] July 22 2008	Drought Stress[4] Sept. 4 2008	Mesotrione Injury[5] 9 DAT[6] Oct. 3 2008	Mesotrione Injury[5] 40 DAIT[7] Nov. 13 2008
71	PSG 366	4.0	8.7	7.7	5.0	7.0	8.0
72	Zinfandel (LTP 2949)	4.0	8.3	7.7	5.3	7.7	9.0
73	Aviator (NA-3259)	4.0	8.0	8.0	3.7	7.0	7.3
74	A99-2427	3.7	9.0	8.7	4.3	8.0	9.0
75	Glenmont	3.7	9.0	7.7	5.7	6.7	7.0
76	CPP 821	3.7	9.0	3.0	3.7	2.3	5.3
77	Hampton (Bd 03-159)	3.7	8.7	6.3	3.7	8.7	8.7
78	Dynamo	3.7	8.7	4.7	3.0	4.3	4.3
79	Shamrock	3.7	8.3	6.7	5.3	7.0	8.3
80	A00-1400	3.3	9.0	8.3	4.3	8.0	8.7
81	Princeton 105	3.3	8.0	7.3	3.3	8.3	8.7
82	DP 76-9066	3.3	8.0	5.3	2.3	6.7	7.7
83	Harmonie	3.0	9.0	3.0	2.3	4.7	6.0
84	Blueberry	3.0	8.7	8.3	6.0	8.7	9.0
85	A01-299	3.0	8.7	8.0	4.7	6.7	8.7
86	AKB449	3.0	8.3	8.3	4.7	8.3	8.3
87	Moonlight SLT (PST-101-390)	3.0	8.3	2.7	2.0	8.0	8.0
88	Corsair (NA-3249)	3.0	7.7	7.7	6.3	8.3	8.3
89	A95-410	3.0	7.3	7.3	4.0	6.7	7.0
90	CP 76-9068	2.7	9.0	3.0	3.3	5.3	6.7
91	Avid	2.7	8.7	7.3	2.3	7.7	8.7
92	Baron	2.7	5.3	7.7	4.0	7.3	7.0
93	4-Season (J-2791)	2.3	8.3	4.0	2.3	5.3	8.7
94	Yankee (NA-3271)	2.3	7.7	5.3	6.0	8.0	9.0
95	Rugby II	2.0	9.0	8.3	4.7	8.0	8.0
96	Barrister	2.0	9.0	8.0	4.3	8.7	8.7
97	Impact	2.0	9.0	7.7	5.3	9.0	8.7
98	Nuchicago (J-1334)	2.0	9.0	7.7	5.0	9.0	8.7
99	Emblem (PST-Y2K-169)	2.0	9.0	7.3	4.7	7.7	8.7
100	Prosperity	2.0	8.3	3.7	4.7	9.0	8.7
101	Nu Destiny	1.7	9.0	9.0	4.3	9.0	9.0
102	Excursion	1.7	9.0	9.0	5.7	8.7	9.0
103	Everest	1.7	9.0	8.3	5.3	8.7	9.0
104	NuGlade	1.7	9.0	8.3	4.0	8.7	8.7
105	Ginney II (J-2024)	1.7	9.0	8.0	5.0	9.0	9.0

(Continued)

Table 2 (continued).

	Cultivar or Selection	Spring Green-up[1] April 3 2008	Seed-heads[2] May 21 2008	Summer Patch[3] July 22 2008	Drought Stress[4] Sept. 4 2008	Mesotrione -------- Injury[5]-------- 9 DAT[6] Oct. 3 2008	40 DAIT[7] Nov. 13 2008
106	Alexa II (J-2404)	1.3	9.0	9.0	5.0	9.0	9.0
107	Sudden Impact (J-2870)	1.3	9.0	8.3	4.7	9.0	9.0
108	J-2502	1.3	9.0	8.0	4.7	8.7	8.7
109	Solar Eclipse (J-2399)	1.3	9.0	7.7	5.0	9.0	8.3
110	Beyond	1.3	9.0	7.7	3.3	9.0	8.3
111	Midnight	1.3	9.0	7.3	5.3	8.7	9.0
112	Granite (J-1326)	1.3	8.7	8.0	6.7	9.0	9.0
113	SW AG 514	1.3	8.7	8.0	6.3	1.7	2.3
114	Bandera (SPTR 2LM95)	1.3	3.3	7.3	3.0	6.0	6.7
115	J-1466	1.0	9.0	9.0	3.3	9.0	9.0
116	Bluestone	1.0	9.0	8.7	5.3	8.7	8.7
117	Everglade	1.0	9.0	7.7	6.0	9.0	9.0
118	Midnight II	1.0	9.0	7.7	4.7	8.7	8.7
119	Award	1.0	9.0	7.7	4.0	8.3	8.7
120	Rhythm	1.0	9.0	7.7	3.7	8.3	8.7
121	Bewitched	1.0	8.7	8.0	4.3	6.3	9.0
	LSD at 5% =	1.6	1.5	2.0	2.4	1.4	1.3

[1]9 = earliest spring green-up
[2]9 = least seedheads
[3]9 = least disease
[4]9 = least drought stress
[5]9 = least mesotrione injury
[6]DAT = days after treatment
[7]DAIT = days after initial treatment

Table 3. The percent turfgrass canopy (C) of Kentucky bluegrass cultivars and selections subjected to wear in April 2008 in a turf trial seeded in September 2005 at North Brunswick, NJ. (Includes all entries of the 2005 National Turfgrass Evaluation Program Kentucky Bluegrass Test - NTEP.)

		Percent Turfgrass Canopy						
		During Wear (Number of Passes)[1]				Recovery (Days after Wear)		
	Cultivar or Selection	16 (C_W) April 25	12 (C_{+12}) April 24	6 (C_{+6}) April 23	0 (C_{BW}) April 21	6 (C_{6DAW}) April 30	20 (C_{20DAW}) May 14	40 (C_{40DAW}) June 3
1	Julia	68.3	71.7	65.0	73.3	75.0	88.3	93.3
2	CPP 822	66.7	68.3	66.7	71.7	75.0	91.7	100.0
3	NA-3248	61.7	65.0	70.0	76.7	70.0	81.7	90.0
4	A99-523	61.7	61.7	71.7	78.3	65.0	80.0	83.3
5	BAR VV 0709	58.3	66.7	73.3	81.7	65.0	71.7	65.0
6	CP 76-9068	58.3	60.0	61.7	61.7	75.0	90.0	100.0
7	POPR 04594	53.3	60.0	71.7	78.3	60.0	81.7	73.3
8	A00-99	53.3	51.7	66.7	73.3	61.7	71.7	75.0
9	A96-1368	51.7	63.3	70.0	68.3	66.7	81.7	80.0
10	CPP 821	51.7	55.0	53.3	50.0	58.3	78.3	93.3
11	MSP 3723	51.7	53.3	63.3	68.3	50.0	68.3	75.0
12	Bariris	51.7	53.3	53.3	58.3	63.3	85.0	90.0
13	A97-1560	50.0	55.0	66.7	73.3	58.3	73.3	75.0
14	Harmonie	46.7	50.0	50.0	56.7	65.0	90.0	96.7
15	NA-3257	46.7	43.3	41.7	48.3	60.0	80.0	86.7
16	Diva	45.0	50.0	58.3	63.3	56.7	80.0	83.3
17	A93-201	45.0	46.7	55.0	58.3	51.7	73.3	76.7
18	Gaelic (Bd 98-1358)	45.0	40.0	40.0	46.7	48.3	70.0	75.0
19	A98-948	43.3	45.0	55.0	61.7	51.7	78.3	85.0
20	Prosperity	43.3	45.0	53.3	55.0	51.7	68.3	78.3

(Continued)

Table 3 (continued).

		Percent Turfgrass Canopy						
		Wear Tolerance (Number of Passes)[1]				Recovery (Days after Wear)		
	Cultivar or Selection	16 (C_W) April 25	12 (C_{+12}) April 24	6 (C_{+6}) April 23	0 (C_{BW}) April 21	6 (C_{6DAW}) April 30	20 (C_{20DAW}) May 14	40 (C_{40DAW}) June 3
21	Blue Note (A01-349)	43.3	43.3	50.0	58.3	50.0	73.3	81.7
22	PST-1A1-899	41.7	50.0	60.0	66.7	55.0	76.7	85.0
23	MSP 3724	41.7	50.0	56.7	61.7	46.7	61.7	71.7
24	A00-247	41.7	48.3	60.0	65.0	48.3	66.7	71.7
25	A97-1287	41.7	41.7	46.7	53.3	50.0	66.7	76.7
26	H94-305	40.0	48.3	60.0	68.3	46.7	68.3	70.0
27	A99-2559	40.0	43.3	48.3	56.7	50.0	76.7	76.7
28	BAR VV 9634	40.0	43.3	46.7	50.0	46.7	66.7	78.3
29	J-3429	40.0	43.3	43.3	45.0	46.7	71.7	80.0
30	BAR VV 9630	40.0	40.0	51.7	53.3	46.7	65.0	73.3
31	Washington	38.3	50.0	56.7	61.7	51.7	76.7	83.3
32	STR 2485	38.3	43.3	53.3	53.3	48.3	63.3	76.7
33	Wild Horse (A97-890)	38.3	43.3	46.7	51.7	46.7	68.3	81.7
34	Bd 99-2103	38.3	36.7	50.0	51.7	40.0	63.3	71.7
35	STR 2553	38.3	35.0	46.7	48.3	43.3	56.7	66.7
36	Belissimo	36.7	45.0	55.0	63.3	40.0	60.0	73.3
37	RAD-343	36.7	41.7	51.7	60.0	46.7	80.0	81.7
38	Princeton 105	36.7	41.7	48.3	50.0	53.3	73.3	80.0
39	A99-2427	36.7	41.7	46.7	58.3	51.7	71.7	81.7
40	Nu Destiny	36.7	41.7	43.3	48.3	43.3	73.3	83.3
41	1QG-38	36.7	38.3	48.3	51.7	35.0	58.3	70.0
42	Bd 03-84	36.7	35.0	48.3	56.7	50.0	75.0	85.0
43	Corsair (NA-3249)	36.7	33.3	40.0	41.7	38.3	53.3	70.0
44	RAD-762	35.0	45.0	53.3	58.3	51.7	70.0	78.3
45	PSG 711	35.0	41.7	51.7	55.0	43.3	65.0	76.7

(Continued)

Table 3 (continued).

	Cultivar or Selection	Percent Turfgrass Canopy: Wear Tolerance (Number of Passes)[1] 16 (C_W) April 25	12 (C_{+12}) April 24	6 (C_{+6}) April 23	0 (C_{BW}) April 21	Recovery (Days after Wear) 6 (C_{6DAW}) April 30	20 (C_{20DAW}) May 14	40 (C_{40DAW}) June 3
46	CPP 817	35.0	41.7	50.0	56.7	43.3	68.3	80.0
47	A99-3122	35.0	41.7	46.7	51.7	48.3	66.7	73.3
48	Mystere	35.0	40.0	56.7	66.7	48.3	65.0	71.7
49	BAR VK 0710	35.0	40.0	48.3	58.3	46.7	71.7	73.3
50	Bd 98-2108	35.0	36.7	46.7	46.7	38.3	65.0	75.0
51	Shiraz (LTP-73)	35.0	31.7	43.3	46.7	38.3	63.3	70.0
52	Moonlight SLT (PST-101-390)	35.0	31.7	41.7	43.3	43.3	68.3	78.3
53	Arrowhead (NA-3261)	35.0	31.7	38.3	46.7	40.0	58.3	71.7
54	A99-2377	33.3	43.3	48.3	55.0	46.7	63.3	75.0
55	A03-66	33.3	36.7	46.7	48.3	45.0	60.0	76.7
56	A00-1254	33.3	36.7	43.3	51.7	41.7	70.0	76.7
57	Shamrock	33.3	35.0	41.7	46.7	38.3	61.7	73.3
58	Midnight	33.3	31.7	35.0	40.0	40.0	71.7	80.0
59	Pinot (LTP-149)	33.3	30.0	40.0	41.7	41.7	66.7	75.0
60	Touche (STR 23180)	31.7	38.3	43.3	46.7	43.3	73.3	76.7
61	Impact	31.7	35.0	48.3	45.0	46.7	76.7	88.3
62	Rugby II	31.7	35.0	46.7	45.0	43.3	68.3	78.3
63	Blueberry	31.7	35.0	38.3	45.0	38.3	61.7	76.7
64	A98-689	31.7	28.3	35.0	40.0	36.7	61.7	73.3
65	PST-109-752	30.0	36.7	36.7	45.0	43.3	68.3	76.7
66	Starburst (STR 2703)	30.0	35.0	46.7	53.3	41.7	60.0	80.0
67	Volt (A98-999)	30.0	35.0	38.3	38.3	38.3	60.0	66.7
68	PST-101-73	30.0	33.3	45.0	46.7	36.7	60.0	71.7
69	Skye	30.0	31.7	38.3	45.0	41.7	73.3	86.7
70	SPTR 2959	30.0	31.7	36.7	40.0	36.7	66.7	81.7

(Continued)

Table 3 (continued).

	Cultivar or Selection	Percent Turfgrass Canopy: Wear Tolerance (Number of Passes)[1] 16 (C_W) April 25	12 (C_{+12}) April 24	6 (C_{+6}) April 23	0 (C_{BW}) April 21	Recovery (Days after Wear) 6 (C_{6DAW}) April 30	20 (C_{20DAW}) May 14	40 (C_{40DAW}) June 3
71	Barrister	30.0	30.0	36.7	38.3	40.0	63.3	78.3
72	A99-3119	28.3	33.3	46.7	53.3	36.7	63.3	73.3
73	Aviator (NA-3259)	28.3	33.3	38.3	45.0	33.3	61.7	76.7
74	DP 76-9081	28.3	31.7	45.0	48.3	40.0	48.3	60.0
75	America	28.3	31.7	40.0	43.3	31.7	55.0	70.0
76	Emblem (PST-Y2K-169)	28.3	30.0	33.3	33.3	36.7	63.3	78.3
77	NuGlade	28.3	28.3	40.0	38.3	36.7	70.0	80.0
78	Sudden Impact (J-2870)	28.3	28.3	35.0	40.0	41.7	75.0	81.7
79	RAD-504	26.7	31.7	41.7	41.7	38.3	58.3	70.0
80	Excursion	26.7	31.7	40.0	41.7	40.0	68.3	83.3
81	BAR VV 8536	26.7	31.7	36.7	46.7	43.3	61.7	75.0
82	Kenblue	26.7	30.0	41.7	53.3	36.7	53.3	58.3
83	BAR VV 0665	26.7	30.0	33.3	35.0	33.3	61.7	76.7
84	Award	26.7	28.3	38.3	33.3	36.7	75.0	80.0
85	Reveille	26.7	26.7	28.3	33.3	33.3	51.7	63.3
86	Everglade	26.7	26.7	26.7	35.0	40.0	73.3	81.7
87	Argos	25.0	28.3	33.3	38.3	31.7	65.0	76.7
88	PSG 366	25.0	28.3	33.3	36.7	31.7	55.0	73.3
89	AKB449	25.0	26.7	33.3	33.3	33.3	53.3	66.7
90	MSP 3722	23.3	26.7	35.0	33.3	35.0	50.0	63.3
91	Rhythm	23.3	25.0	35.0	33.3	31.7	55.0	73.3
92	Granite (J-1326)	23.3	25.0	33.3	31.7	33.3	61.7	81.7
93	Zinfandel (LTP 2949)	23.3	25.0	33.3	35.0	28.3	48.3	61.7
94	Everest	23.3	25.0	26.7	33.3	31.7	66.7	81.7
95	H98-701	23.3	21.7	30.0	36.7	26.7	48.3	56.7

(Continued)

Table 3 (continued).

		Percent Turfgrass Canopy						
		Wear Tolerance (Number of Passes)[1]				Recovery (Days after Wear)		
	Cultivar or Selection	16 (C_W) April 25	12 (C_{+12}) April 24	6 (C_{+6}) April 23	0 (C_{BW}) April 21	6 (C_{6DAW}) April 30	20 (C_{20DAW}) May 14	40 (C_{40DAW}) June 3
96	Juliet (Bd 95-1930)	21.7	31.7	36.7	40.0	38.3	63.3	73.3
97	J-2502	21.7	26.7	31.7	31.7	26.7	55.0	73.3
98	4-Season (J-2791)	21.7	21.7	28.3	26.7	30.0	63.3	81.7
99	Bluestone	21.7	21.7	28.3	28.3	30.0	63.3	70.0
100	DP 76-9066	21.7	21.7	25.0	26.7	28.3	55.0	78.3
101	A95-410	20.0	26.7	30.0	35.0	33.3	58.3	75.0
102	RAD-0AN64	20.0	25.0	33.3	40.0	33.3	63.3	70.0
103	Midnight II	20.0	25.0	30.0	31.7	35.0	61.7	75.0
104	Nuchicago (J-1334)	20.0	25.0	25.0	33.3	28.3	70.0	75.0
105	Alexa II (J-2404)	20.0	18.3	23.3	28.3	31.7	61.7	85.0
106	Ginney II (J-2024)	20.0	16.7	20.0	28.3	26.7	60.0	81.7
107	J-1466	18.3	25.0	30.0	35.0	30.0	76.7	85.0
108	Glenmont	18.3	23.3	23.3	30.0	26.7	40.0	60.0
109	Baron	18.3	21.7	28.3	31.7	28.3	58.3	75.0
110	Bewitched	18.3	18.3	23.3	31.7	28.3	61.7	75.0
111	Bandera (SPTR 2LM95)	18.3	18.3	23.3	26.7	26.7	48.3	68.3
112	Yankee (NA-3271)	18.3	18.3	18.3	21.7	31.7	60.0	71.7
113	Hampton (Bd 03-159)	16.7	21.7	20.0	18.3	23.3	46.7	73.3
114	DLF 76-9075	16.7	18.3	30.0	31.7	25.0	40.0	70.0
115	Solar Eclipse (J-2399)	16.7	18.3	21.7	26.7	23.3	61.7	81.7
116	Dynamo	16.7	15.0	18.3	25.0	20.0	48.3	73.3
117	Beyond	15.0	16.7	21.7	23.3	25.0	60.0	76.7
118	Avid	15.0	16.7	18.3	18.3	21.7	48.3	65.0
119	A01-299	13.3	15.0	18.3	23.3	18.3	35.0	45.0
120	SW AG 514	11.7	11.7	13.3	13.3	16.7	31.7	56.7

(Continued)

Table 3 (continued).

		Percent Turfgrass Canopy						
		Wear Tolerance (Number of Passes)[1]				Recovery (Days after Wear)		
	Cultivar or Selection	16 (C_W) April 25	12 (C_{+12}) April 24	6 (C_{+6}) April 23	0 (C_{BW}) April 21	6 (C_{6DAW}) April 30	20 (C_{20DAW}) May 14	40 (C_{40DAW}) June 3
121	A00-1400	10.0	15.0	18.3	20.0	18.3	43.3	60.0
	LSD at 5% =	17.5	19.0	21.3	21.4	17.4	18.2	11.5

[1] Wear tolerance and recovery assessed as percent (fullness) of turfgrass canopy using a 0 to 100% scale (0 = absence of a turfgrass canopy to 100 = full canopy).

Table 4. The percent turfgrass canopy (C) of Kentucky bluegrass cultivars and selections subjected to wear in November 2008 in a turf trial seeded in September 2005 at North Brunswick, NJ. (Includes all entries of the 2005 National Turfgrass Evaluation Program Kentucky Bluegrass Test - NTEP.)

		----------% Turfgrass Canopy[1]--------				---%Turfgrass Canopy---	
		--During Wear (Number of Passes)--			Turf	-Days after Wear (DAW)-	
		36	18	0	-Quality[2]-	9	19
	Cultivar or Selection	(C_W) Nov. 5	(C_{+18}) Nov. 4	(C_{BW}) Nov. 3	(1-9) Nov. 7	(C_{9DAW}) Nov. 14	(C_{19DAW}) Nov. 24
1	Harmonie	75.0	90.0	98.3	8.0	51.7	43.3
2	CP 76-9068	73.3	91.7	100.0	8.7	50.0	40.0
3	Emblem (PST-Y2K-169)	71.7	86.7	98.3	8.0	50.0	36.7
4	CPP 822	70.0	86.7	98.3	8.0	51.7	40.0
5	CPP 821	68.3	86.7	96.7	7.3	43.3	36.7
6	Bariris	61.7	78.3	90.0	6.7	41.7	38.3
7	NA-3248	55.0	78.3	91.7	6.3	46.7	43.3
8	BAR VV 0709	53.3	83.3	95.0	7.0	50.0	48.3
9	Prosperity	51.7	75.0	81.7	6.3	30.0	30.0
10	Julia	51.7	65.0	80.0	5.0	36.7	30.0
11	Midnight	50.0	73.3	90.0	6.3	31.7	33.3
12	NA-3257	50.0	73.3	86.7	6.7	46.7	43.3
13	Nu Destiny	48.3	76.7	88.3	6.7	35.0	36.7
14	SW AG 514	48.3	75.0	93.3	5.3	40.0	30.0
15	Excursion	48.3	75.0	86.7	5.7	33.3	33.3
16	Solar Eclipse (J-2399)	48.3	75.0	85.0	7.0	38.3	35.0
17	Sudden Impact (J-2870)	46.7	75.0	91.7	7.0	35.0	33.3
18	Nuchicago (J-1334)	45.0	70.0	86.7	5.7	30.0	28.3
19	Everglade	43.3	75.0	88.3	6.7	38.3	33.3
20	Award	43.3	71.7	88.3	5.7	25.0	28.3
21	Alexa II (J-2404)	43.3	71.7	85.0	6.3	33.3	30.0
22	Barrister	41.7	61.7	83.3	5.3	30.0	31.7
23	Rugby II	41.7	53.3	78.3	5.3	25.0	28.3
24	Everest	40.0	68.3	85.0	6.0	30.0	26.7
25	Granite (J-1326)	38.3	71.7	86.7	6.0	28.3	31.7
26	J-1466	38.3	71.7	85.0	5.0	30.0	31.7
27	J-2502	38.3	68.3	85.0	5.7	30.0	31.7
28	Bewitched	38.3	68.3	85.0	5.7	31.7	23.3
29	J-3429	38.3	66.7	88.3	4.7	21.7	21.7
30	Ginney II (J-2024)	36.7	76.7	86.7	6.0	30.0	30.0
31	Washington	36.7	63.3	81.7	5.3	31.7	31.7
32	Impact	35.0	71.7	86.7	4.7	28.3	31.7
33	Blue Note (A01-349)	35.0	68.3	88.3	5.3	40.0	36.7
34	Midnight II	33.3	70.0	85.0	5.3	30.0	28.3
35	Beyond	33.3	61.7	81.7	5.7	31.7	30.0

(Continued)

Table 4 (continued).

	Cultivar or Selection	% Turfgrass Canopy[1] During Wear (Number of Passes) 36 (C_W) Nov. 5	18 (C_{+18}) Nov. 4	0 (C_{BW}) Nov. 3	Turf Quality[2] (1-9) Nov. 7	%Turfgrass Canopy Days after Wear (DAW) 9 (C_{9DAW}) Nov. 14	19 (C_{19DAW}) Nov. 24
36	NuGlade	31.7	63.3	81.7	5.7	26.7	28.3
37	A96-1368	31.7	61.7	93.3	6.0	31.7	33.3
38	4-Season (J-2791)	31.7	60.0	78.3	3.3	21.7	18.3
39	BAR VV 0665	31.7	55.0	78.3	4.0	23.3	21.7
40	Blueberry	31.7	48.3	81.7	4.7	25.0	18.3
41	Touche (STR 23180)	30.0	66.7	83.3	5.3	28.3	26.7
42	BAR VV 8536	30.0	60.0	86.7	5.0	23.3	21.7
43	RAD-762	30.0	58.3	80.0	5.0	28.3	26.7
44	Rhythm	28.3	66.7	81.7	3.7	21.7	23.3
45	BAR VV 9634	28.3	60.0	75.0	3.0	21.7	25.0
46	BAR VV 9630	26.7	56.7	73.3	3.3	25.0	28.3
47	A97-1287	26.7	55.0	85.0	4.0	31.7	31.7
48	Baron	26.7	55.0	81.7	4.3	26.7	25.0
49	Yankee (NA-3271)	26.7	46.7	76.7	3.3	28.3	21.7
50	A99-2559	25.0	61.7	80.0	4.3	26.7	28.3
51	RAD-343	25.0	61.7	76.7	4.7	21.7	21.7
52	Skye	25.0	60.0	85.0	4.7	28.3	23.3
53	PST-101-73	25.0	55.0	83.3	2.7	20.0	23.3
54	Shamrock	25.0	50.0	80.0	3.0	21.7	21.7
55	DP 76-9066	25.0	48.3	75.0	3.7	16.7	18.3
56	PST-1A1-899	25.0	43.3	81.7	3.0	15.0	18.3
57	Bluestone	23.3	56.7	85.0	4.7	25.0	21.7
58	A98-948	23.3	56.7	85.0	3.7	26.7	25.0
59	Starburst (STR 2703)	23.3	53.3	80.0	2.3	20.0	21.7
60	Reveille	23.3	51.7	78.3	4.0	23.3	23.3
61	POPR 04594	23.3	43.3	80.0	5.7	23.3	23.3
62	CPP 817	21.7	56.7	80.0	3.7	28.3	28.3
63	A98-689	21.7	53.3	81.7	3.0	15.0	16.7
64	AKB449	21.7	46.7	80.0	2.7	13.3	13.3
65	Juliet (Bd 95-1930)	21.7	41.7	70.0	3.7	21.7	23.3
66	Corsair (NA-3249)	21.7	40.0	65.0	3.3	20.0	20.0
67	Diva	20.0	53.3	83.3	5.3	26.7	25.0
68	MSP 3724	20.0	51.7	83.3	3.0	21.7	20.0
69	Argos	20.0	51.7	83.3	3.7	11.7	13.3
70	A99-2427	20.0	50.0	78.3	2.7	21.7	18.3

(Continued)

Table 4 (continued).

	Cultivar or Selection	% Turfgrass Canopy[1] During Wear (Number of Passes) 36 (C_W) Nov. 5	18 (C_{+18}) Nov. 4	0 (C_{BW}) Nov. 3	Turf Quality[2] (1-9) Nov. 7	% Turfgrass Canopy Days after Wear (DAW) 9 (C_{9DAW}) Nov. 14	19 (C_{19DAW}) Nov. 24
71	A93-201	20.0	48.3	85.0	3.3	20.0	21.7
72	RAD-0AN64	20.0	43.3	70.0	3.0	16.7	16.7
73	Hampton (Bd 03-159)	18.3	61.7	76.7	2.3	15.0	11.7
74	A00-247	18.3	51.7	88.3	3.7	23.3	25.0
75	A99-3119	18.3	51.7	83.3	3.7	23.3	23.3
76	SPTR 2959	18.3	51.7	81.7	2.7	21.7	20.0
77	A99-523	18.3	48.3	85.0	3.7	21.7	23.3
78	RAD-504	18.3	46.7	78.3	3.0	15.0	18.3
79	STR 2485	18.3	46.7	75.0	4.3	21.7	20.0
80	Moonlight SLT (PST-101-390)	18.3	46.7	75.0	3.0	16.7	20.0
81	Zinfandel (LTP 2949)	18.3	46.7	70.0	3.0	16.7	16.7
82	Wild Horse (A97-890)	18.3	45.0	83.3	2.7	28.3	30.0
83	Aviator (NA-3259)	18.3	45.0	73.3	2.7	15.0	15.0
84	H94-305	16.7	43.3	83.3	2.3	11.7	13.3
85	Princeton 105	16.7	41.7	78.3	3.7	25.0	26.7
86	PSG 711	16.7	38.3	76.7	1.7	13.3	16.7
87	1QG-38	16.7	35.0	76.7	3.0	18.3	15.0
88	MSP 3722	16.7	28.3	70.0	2.7	15.0	15.0
89	Gaelic (Bd 98-1358)	15.0	50.0	78.3	2.3	23.3	21.7
90	Shiraz (LTP-73)	15.0	46.7	83.3	3.3	15.0	15.0
91	A03-66	15.0	46.7	80.0	2.0	20.0	21.7
92	MSP 3723	15.0	45.0	78.3	2.3	23.3	21.7
93	PST-109-752	15.0	45.0	73.3	2.7	18.3	15.0
94	PSG 366	15.0	30.0	66.7	2.0	11.7	11.7
95	Bd 03-84	13.3	46.7	83.3	3.3	16.7	18.3
96	BAR VK 0710	13.3	45.0	75.0	3.0	18.3	15.0
97	A01-299	13.3	41.7	68.3	2.3	8.3	13.3
98	A97-1560	13.3	40.0	81.7	2.7	21.7	20.0
99	STR 2553	13.3	38.3	78.3	3.7	18.3	20.0
100	Volt (A98-999)	13.3	36.7	78.3	2.0	10.0	13.3
101	A99-2377	13.3	33.3	75.0	2.3	13.3	20.0
102	Bd 98-2108	13.3	33.3	75.0	2.7	16.7	16.7
103	Dynamo	13.3	31.7	70.0	2.0	13.3	15.0
104	A00-1254	11.7	45.0	80.0	2.7	11.7	16.7
105	Pinot (LTP-149)	11.7	43.3	75.0	2.7	10.0	11.7

(Continued)

Table 4 (continued).

	Cultivar or Selection	% Turfgrass Canopy[1] During Wear (Number of Passes) 36 (C_W) Nov. 5	18 (C_{+18}) Nov. 4	0 (C_{BW}) Nov. 3	Turf Quality[2] (1-9) Nov. 7	%Turfgrass Canopy Days after Wear (DAW) 9 (C_{9DAW}) Nov. 14	19 (C_{19DAW}) Nov. 24
106	Belissimo	11.7	40.0	83.3	2.7	20.0	21.7
107	Avid	11.7	40.0	73.3	3.0	21.7	26.7
108	Arrowhead (NA-3261)	11.7	40.0	73.3	2.3	18.3	15.0
109	A00-99	11.7	36.7	80.0	2.7	20.0	20.0
110	A99-3122	11.7	35.0	78.3	2.7	11.7	11.7
111	DLF 76-9075	11.7	33.3	73.3	1.3	10.0	11.7
112	America	11.7	33.3	66.7	1.7	11.7	11.7
113	Mystere	10.0	36.7	78.3	1.7	13.3	16.7
114	A00-1400	10.0	35.0	78.3	1.7	5.0	10.0
115	Bandera (SPTR 2LM95)	10.0	35.0	76.7	2.3	13.3	11.7
116	Glenmont	10.0	33.3	76.7	2.7	11.7	10.0
117	H98-701	10.0	23.3	70.0	1.0	5.0	11.7
118	A95-410	10.0	23.3	68.3	1.3	6.7	8.3
119	Bd 99-2103	8.3	30.0	78.3	2.7	13.3	11.7
120	Kenblue	6.7	30.0	66.7	1.7	16.7	15.0
121	DP 76-9081	6.7	28.3	78.3	1.3	8.3	6.7
	LSD at 5% =	16.1	20.7	12.1	2.1	11.7	11.0

[1] Percent (fullness) of turfgrass canopy using a 0 to 100% scale (0 = absence of a turfgrass canopy to 100 = full canopy).

[2] Turf quality rated on a 1 to 9 scale where 9 = the fullest turfgrass canopy and most uniform ground cover after wear.

Table 5. Performance of tall fescue cultivars and selections in a turf trial seeded in September 2006 at North Brunswick, NJ. (Includes all entries of the 2006 National Turfgrass Evaluation Program Tall Fescue Test - NTEP.)

		Turf Quality[1]									
	Cultivar or Selection	2007-2008 Avg.	2007 Avg.	2008 Avg.	April 2008	May 2008	June 2008	July 2008	Aug. 2008	Sept. 2008	Oct. 2008
1	Bullseye	8.2	7.9	8.4	8.7	8.3	8.3	7.7	8.3	9.0	8.7
2	RKCL	7.7	7.3	8.1	8.0	8.3	7.3	7.7	8.3	8.7	8.3
3	RK 5	7.6	7.3	7.8	7.7	6.7	8.7	7.3	8.7	8.3	7.7
4	DP 50-9440	7.6	7.2	8.0	8.3	8.7	7.7	6.3	8.7	9.0	7.7
5	Firecracker LS (MVS-MST)	7.6	7.4	7.8	7.7	8.3	6.7	6.3	8.3	8.3	8.7
6	NA-BT-1	7.6	7.2	8.0	7.7	6.0	7.7	8.7	8.7	9.0	8.3
7	Turbo	7.6	7.1	8.0	8.0	8.0	8.0	7.7	8.3	8.0	8.3
8	Falcon V (ATM)	7.5	7.4	7.7	8.0	6.3	6.7	8.0	8.0	8.0	9.0
9	Wolfpack II (PST-5WMB)	7.5	7.1	7.9	7.3	7.3	7.7	8.7	7.7	8.7	8.3
10	Monet (LTP-610 CL)	7.5	7.5	7.5	8.7	7.0	6.7	6.3	7.7	8.0	8.0
11	TG 50-9460	7.5	7.3	7.7	8.0	6.3	8.0	8.0	8.0	8.3	7.3
12	Hemi	7.3	7.1	7.4	7.7	6.7	6.7	7.3	8.0	8.3	7.3
13	Essential (IS-TF-154)	7.2	7.3	7.1	7.0	7.0	6.7	6.0	7.7	8.0	7.7
14	Speedway (STR-8BPDX)	7.2	7.0	7.5	7.0	6.3	7.0	8.0	8.0	8.0	8.0
15	SC-1	7.2	7.4	7.0	7.3	7.0	6.0	6.7	7.0	8.0	7.3
16	Rhambler SRP (Rhambler)	7.2	7.0	7.4	7.3	6.0	7.3	7.7	8.0	7.3	8.3
17	RK 6	7.2	6.8	7.7	8.7	7.3	6.7	7.0	8.0	8.0	8.0
18	Mustang 4 (M4)	7.2	6.7	7.7	7.3	7.3	7.7	7.7	8.3	8.0	7.7
19	IS-TF-159	7.1	6.5	7.7	7.7	7.7	8.3	8.0	8.3	7.0	7.0
20	Spyder LS (Z-2000)	7.0	7.4	6.7	8.0	7.3	4.7	4.3	7.0	7.7	8.0
21	K06-WA	7.0	6.5	7.6	7.7	8.3	6.3	5.3	8.0	8.7	8.7
22	3rd Millennium SRP	7.0	6.7	7.2	7.3	7.3	7.0	7.3	7.0	7.3	7.0
23	Firenza	7.0	6.6	7.4	6.7	6.7	7.7	7.3	7.7	7.3	8.3
24	DP 50-9407	6.9	6.5	7.3	7.3	7.0	7.3	6.3	7.3	7.7	8.3
25	RK 4	6.9	6.8	7.0	7.7	7.0	6.0	5.3	7.7	8.3	7.0

(Continued)

Table 5 (continued).

	Cultivar or Selection	Turf Quality[1] 2007-2008 Avg.	2007 Avg.	2008 Avg.	April 2008	May 2008	June 2008	July 2008	Aug. 2008	Sept. 2008	Oct. 2008
26	Shenandoah III (SH 3)	6.9	6.8	7.0	7.7	6.0	6.0	5.7	7.7	8.3	7.7
27	Finelawn Xpress (RP 2)	6.9	6.6	7.3	7.3	6.0	6.7	6.7	7.7	8.0	8.3
28	ATE	6.9	7.0	6.7	7.3	6.0	6.3	6.7	6.7	7.0	7.0
29	Talledega (RP 3)	6.8	6.9	6.7	6.7	7.3	6.0	6.7	7.0	6.0	7.3
30	Jamboree (IS-TF-128)	6.8	6.7	7.0	5.7	8.3	6.7	7.0	7.3	7.0	6.7
31	Raptor II (MVS-TF-158)	6.8	6.7	6.8	6.7	7.3	7.3	6.3	6.3	6.7	7.0
32	Aggressor (IS-TF-153)	6.7	6.2	7.1	7.7	6.7	6.7	6.3	8.0	8.0	6.7
33	Escalade	6.5	6.6	6.5	6.7	5.7	7.0	6.3	6.7	6.3	6.7
34	Van Gogh (LTP-RK2)	6.5	6.2	6.9	7.3	6.7	6.7	6.0	8.0	6.0	7.7
35	J-140	6.5	6.4	6.5	6.0	6.7	6.7	6.3	6.3	6.7	7.0
36	STR-8BB5	6.5	6.4	6.7	6.0	5.7	7.0	7.0	7.0	6.3	7.7
37	Traverse SPR (RK-1)	6.4	6.2	6.6	7.0	5.0	6.0	5.7	7.0	7.3	8.0
38	Rocket (IS-TF-147)	6.4	6.0	6.8	5.7	6.3	6.7	6.3	7.3	7.0	8.0
39	BBM	6.4	6.3	6.5	7.0	7.0	5.3	5.7	6.7	6.7	7.0
40	SR 8650 (STR-8LMM)	6.4	6.3	6.4	5.7	6.3	6.3	7.3	6.7	7.0	5.7
41	CE-2	6.3	6.2	6.4	6.0	6.7	6.3	6.3	6.7	6.0	6.7
42	IS-TF-138	6.2	6.3	6.0	5.3	6.7	6.0	4.0	7.3	6.0	7.0
43	Falcon NG (CE 1)	6.2	6.0	6.3	6.0	5.3	6.0	7.7	6.7	6.3	6.3
44	PST-5HP	6.2	5.8	6.5	6.3	7.3	6.3	6.0	6.3	6.3	6.7
45	BAR Fa 6253	6.2	5.5	6.7	6.7	6.7	7.3	6.3	7.0	6.7	6.3
46	BGR-TF1	6.1	6.0	6.3	5.7	7.0	6.0	6.0	6.3	6.7	6.3
47	RNP	6.1	6.2	5.9	6.7	7.7	5.7	3.7	6.0	5.7	6.0
48	PSG-82BR	6.1	5.9	6.2	5.0	5.7	6.3	6.0	7.0	6.7	6.7
49	IS-TF-152	6.1	5.9	6.1	5.3	7.7	6.7	3.7	6.7	5.7	7.3
50	LS-06	6.1	5.6	6.6	6.7	7.7	7.7	5.3	6.3	6.0	6.3

(Continued)

Table 5 (continued).

	Cultivar or Selection	Turf Quality[1] 2007-2008 Avg.	2007 Avg.	2008 Avg.	April 2008	May 2008	June 2008	July 2008	Aug. 2008	Sept. 2008	Oct. 2008
51	CE-4	6.0	6.2	5.8	5.7	6.0	6.3	5.7	5.3	6.3	5.0
52	DKS	5.9	6.2	5.7	7.0	7.7	5.0	3.7	5.3	5.3	5.7
53	LS-03	5.9	6.0	5.9	5.7	7.3	4.3	5.7	6.3	6.3	5.7
54	Titanium LS (MVS-BB-1)	5.9	5.9	6.0	7.3	5.0	5.3	5.0	6.3	6.7	6.0
55	Fat Cat (IS-TF-161)	5.9	5.7	6.0	6.0	7.3	6.3	4.7	6.7	6.0	5.3
56	AST-4	5.9	5.9	5.7	6.0	8.0	5.0	4.7	5.7	5.3	5.7
57	AST-3	5.9	5.9	5.8	6.3	8.0	5.3	5.0	5.7	5.3	5.0
58	IS-TF-135	5.9	5.8	6.0	5.3	6.7	6.3	4.7	6.3	6.3	6.3
59	Darlington (CS-TF1)	5.9	5.7	6.0	5.7	7.7	6.0	6.0	5.7	5.7	5.3
60	JT-45	5.8	5.5	6.2	5.7	6.7	6.7	5.7	6.3	6.0	6.0
61	J-130	5.8	5.7	5.9	6.3	5.7	6.0	6.7	6.0	5.0	5.3
62	Toccoa (IS-TF-151)	5.8	5.6	6.0	4.7	7.0	6.3	5.0	6.3	6.7	6.0
63	Rebel IV	5.8	6.1	5.5	4.7	5.0	5.7	5.3	5.7	5.7	6.3
64	DP 50-9411	5.8	5.8	5.7	6.7	7.0	4.3	4.0	6.0	5.7	6.3
65	Col-M	5.8	5.7	5.8	7.0	7.0	5.3	3.7	5.7	6.0	5.7
66	Cezanne Rz (LTP-CRL)	5.8	5.6	6.0	5.3	6.0	6.0	5.7	6.3	6.0	6.3
67	Padre	5.7	5.7	5.8	6.0	6.0	5.0	4.7	6.0	6.7	6.0
68	JT-41	5.7	6.1	5.3	5.3	6.7	4.3	4.3	5.7	5.3	5.3
69	KZ-1	5.7	5.7	5.7	7.0	8.0	5.3	3.7	5.0	5.0	6.0
70	PSG-85QR	5.7	5.3	6.1	6.3	5.7	6.0	6.0	6.7	5.7	6.3
71	GE-1	5.7	5.8	5.5	6.0	5.3	4.7	5.3	5.7	6.0	5.3
72	JT-42	5.6	5.6	5.7	5.7	6.0	5.0	5.7	6.7	4.3	6.3
73	AST-1	5.6	5.1	6.2	6.0	8.0	6.0	4.7	6.7	6.0	6.0
74	Tahoe II	5.6	5.7	5.4	5.7	6.3	4.7	6.3	4.3	5.0	5.7
75	AST-2	5.6	6.0	5.2	5.7	7.0	4.0	3.3	5.3	5.7	5.0

(Continued)

Table 5 (continued).

	Cultivar or Selection	Turf Quality[1] 2007-2008 Avg.	2007 Avg.	2008 Avg.	April 2008	May 2008	June 2008	July 2008	Aug. 2008	Sept. 2008	Oct. 2008
76	LS-11	5.6	5.3	5.8	5.7	7.3	6.0	5.0	5.7	5.7	5.7
77	Col-J	5.5	5.7	5.3	5.3	5.3	4.7	4.3	5.7	6.3	5.7
78	JT-36	5.5	5.5	5.5	5.7	6.7	4.7	5.3	5.3	5.0	6.0
79	ATF 1247	5.5	5.1	5.9	6.7	6.7	5.3	5.7	6.0	5.7	5.3
80	RAD-TF17	5.5	5.5	5.4	5.7	6.0	6.3	5.3	5.0	5.3	4.3
81	Titanium	5.5	5.2	5.7	5.7	5.0	5.7	5.3	6.3	5.3	6.7
82	Skyline	5.4	5.2	5.6	5.0	6.0	6.3	5.3	5.7	6.0	5.0
83	KZ-2	5.4	5.5	5.2	5.7	7.3	5.0	3.3	5.0	5.0	5.3
84	Tulsa Time (Tulsa III)	5.4	5.4	5.4	5.3	6.7	4.7	4.0	5.7	5.3	6.0
85	ATF-1199	5.4	5.0	5.8	5.3	6.0	6.0	5.3	5.7	6.0	6.3
86	AST 7003	5.4	5.8	5.0	5.7	7.0	3.0	2.7	5.7	5.7	5.3
87	JT-33	5.4	5.6	5.2	5.3	6.3	4.0	5.3	5.3	4.3	5.3
88	Col-1	5.4	5.1	5.6	6.3	6.7	5.3	5.0	5.3	5.7	5.0
89	AST 7002	5.4	5.1	5.6	5.3	6.3	4.7	3.7	6.3	6.3	6.7
90	MVS-1107	5.4	4.8	5.9	5.3	5.3	6.3	5.7	6.3	6.0	6.3
91	MVS-341	5.3	5.6	5.1	5.3	6.0	5.0	4.3	5.3	4.7	5.3
92	06-DUST	5.3	5.1	5.6	7.0	5.0	5.0	5.7	5.7	5.3	5.3
93	Falcon IV	5.3	5.8	4.8	5.0	4.7	4.3	4.0	5.3	5.3	5.0
94	GWTF	5.3	5.3	5.3	6.0	7.7	4.3	4.0	5.0	4.7	5.7
95	Turbo Rz (Burl-TF8)	5.3	5.3	5.3	4.7	5.0	4.0	5.0	6.3	5.7	6.3
96	NA-SS	5.2	5.1	5.3	5.7	6.7	4.7	3.7	6.7	5.3	4.7
97	Justice	5.2	5.2	5.2	5.7	6.0	5.3	4.3	5.7	4.0	5.3
98	ATF 1328	5.1	5.5	4.8	6.0	7.0	3.0	2.7	4.7	5.3	4.7
99	Rembrandt	5.1	5.4	4.8	5.0	4.0	4.7	5.0	5.3	4.3	5.3
100	06-WALK	5.1	5.1	5.0	5.0	5.3	5.0	5.7	4.7	5.0	4.3

(Continued)

Table 5 (continued).

	Cultivar or Selection	Turf Quality[1] 2007-2008 Avg.	2007 Avg.	2008 Avg.	April 2008	May 2008	June 2008	July 2008	Aug. 2008	Sept. 2008	Oct. 2008
101	AST 7001	5.1	5.0	5.1	4.3	7.3	4.7	4.3	5.7	5.0	4.7
102	BGR-TF2	5.0	5.3	4.7	6.0	6.7	3.3	2.7	5.0	4.0	5.0
103	PSG-TTRH	5.0	4.9	5.0	5.0	5.7	4.7	5.0	5.3	4.7	4.7
104	312	4.9	5.3	4.5	5.0	5.3	3.7	2.3	5.3	5.0	5.0
105	Hunter	4.8	5.0	4.6	4.7	6.7	3.3	4.3	4.7	4.3	4.3
106	Biltmore	4.7	4.9	4.6	5.0	4.7	5.7	4.0	5.0	4.3	3.3
107	Einstein	4.7	5.2	4.2	4.7	4.3	3.7	3.3	4.0	5.0	4.3
108	STR-8GRQR	4.7	4.6	4.9	5.0	6.0	4.0	4.3	5.3	4.7	4.7
109	Magellan	4.6	4.8	4.4	5.0	4.3	4.7	4.0	4.3	4.0	4.7
110	BAR Fa 6363	4.6	4.5	4.6	5.0	5.7	4.7	4.0	4.3	4.3	4.7
111	Lindbergh	4.4	4.3	4.4	4.0	5.0	4.0	5.0	5.0	4.0	3.7
112	GO-1BFD	4.3	4.2	4.5	3.7	4.7	4.3	5.7	4.0	4.3	4.7
113	Plato	4.1	4.3	4.0	4.0	4.0	3.7	4.0	4.3	4.3	3.7
114	PSG-TTST	4.1	4.2	3.9	3.7	4.0	3.7	4.3	4.0	3.7	4.0
115	PSG-RNDR	4.0	4.1	4.0	3.7	6.3	4.0	3.0	3.7	3.3	4.0
116	Aristotle	4.0	3.9	4.0	4.0	4.3	4.0	4.7	4.0	4.0	3.0
117	Pennington's Best	3.7	3.8	3.7	3.3	3.3	4.3	3.7	4.0	4.0	3.3
118	Water Saver	3.6	3.4	3.8	3.0	3.7	3.7	5.0	3.7	4.0	3.7
119	Silverado	3.4	3.5	3.4	4.0	3.3	3.7	4.0	3.3	3.0	2.3
120	Kentucky 31	1.1	1.1	1.1	1.3	1.3	1.0	1.0	1.0	1.0	1.0
	LSD at 5% =	0.9	1.0	1.2	1.6	1.5	2.4	2.9	1.5	1.8	1.5

[1]9 = best turf quality

Table 6. Brown patch susceptibility and spring green-up of tall fescue cultivars and selections in a turf trial seeded in September 2006 at North Brunswick, NJ. (Includes all entries of the 2006 National Turfgrass Evaluation Program Tall Fescue Test - NTEP.)

	Cultivar or Selection	Brown Patch[1] June 30 2008	Brown Patch[1] July 8 2008	Brown Patch[1] July 21 2008	Brown Patch[1] Sept. 19 2008	Spring Green-up[2] April 9 2008
1	RK 5	9.0	8.3	8.7	8.0	4.7
2	Wolfpack II (PST-5WMB)	8.7	8.7	9.0	9.0	5.7
3	Mustang 4 (M4)	8.3	8.7	8.7	8.3	4.3
4	Aggressor (IS-TF-153)	8.3	7.7	8.0	8.3	5.3
5	Speedway (STR-8BPDX)	8.0	8.3	8.7	8.7	5.7
6	Turbo	8.0	8.0	9.0	9.0	3.7
7	NA-BT-1	8.0	8.0	8.7	8.7	5.7
8	IS-TF-159	8.0	8.0	8.3	8.0	2.7
9	Firenza	8.0	8.0	8.3	7.7	4.7
10	RKCL	8.0	7.7	8.0	9.0	4.7
11	Bullseye	8.0	7.7	7.7	9.0	3.7
12	BAR Fa 6253	8.0	7.3	8.3	8.3	5.3
13	DP 50-9440	8.0	6.0	8.3	9.0	3.0
14	SR 8650 (STR-8LMM)	7.7	8.3	9.0	8.0	3.7
15	Falcon V (ATM)	7.7	8.3	8.3	8.3	5.3
16	TG 50-9460	7.7	8.0	8.7	8.7	7.0
17	Rhambler SRP (Rhambler)	7.7	8.0	8.7	8.3	5.7
18	DP 50-9407	7.7	7.3	8.0	8.7	4.0
19	Monet (LTP-610 CL)	7.7	7.3	7.3	8.3	5.0
20	Shenandoah III (SH 3)	7.7	6.3	7.7	8.3	5.0
21	Escalade	7.7	6.0	7.3	8.3	4.7
22	Talledega (RP 3)	7.3	8.0	8.7	9.0	3.0
23	BGR-TF1	7.3	8.0	8.3	7.7	3.3
24	Jamboree (IS-TF-128)	7.3	7.3	8.3	8.0	2.7
25	PSG-85QR	7.3	7.3	7.7	8.3	5.3
26	Raptor II (MVS-TF-158)	7.3	7.0	7.3	8.0	2.0
27	STR-8BB5	7.3	6.3	8.3	7.7	4.0
28	06-WALK	7.3	6.3	7.7	7.7	3.3
29	K06-WA	7.3	5.0	7.3	8.3	6.0
30	3rd Millennium SRP	7.0	7.7	8.3	8.7	4.3
31	RK 6	7.0	7.3	8.0	8.7	3.7
32	Titanium	7.0	7.0	8.3	8.0	4.7
33	ATE	7.0	7.0	8.0	8.0	4.0
34	SC-1	7.0	6.7	8.0	8.7	5.0
35	Rocket (IS-TF-147)	7.0	6.7	8.0	8.7	3.3

(Continued)

Table 6 (continued).

	Cultivar or Selection	Brown Patch[1] June 30 2008	Brown Patch[1] July 8 2008	Brown Patch[1] July 21 2008	Brown Patch[1] Sept. 19 2008	Spring Green-up[2] April 9 2008
36	GO-1BFD	7.0	6.7	8.0	8.7	7.3
37	Toccoa (IS-TF-151)	7.0	6.7	7.7	8.0	1.7
38	CE-2	7.0	6.7	7.7	8.7	4.3
39	CE-4	7.0	6.7	7.3	8.0	3.3
40	Finelawn Xpress (RP 2)	7.0	6.0	8.3	8.3	3.7
41	LS-06	7.0	6.0	7.0	7.3	5.0
42	Fat Cat (IS-TF-161)	7.0	5.7	6.7	7.3	2.7
43	Van Gogh (LTP-RK2)	7.0	5.3	6.7	7.0	7.0
44	RK 4	7.0	5.0	7.0	8.7	4.7
45	Turbo Rz (Burl-TF8)	6.7	7.7	8.0	8.0	3.7
46	Tahoe II	6.7	7.7	7.7	7.7	2.0
47	Firecracker LS (MVS-MST)	6.7	7.3	7.7	8.7	4.7
48	Hemi	6.7	7.0	8.7	9.0	3.7
49	ATF-1199	6.7	7.0	8.0	8.7	4.3
50	PSG-TTRH	6.7	7.0	7.7	8.0	1.7
51	Silverado	6.7	6.7	8.0	8.0	5.0
52	PSG-82BR	6.7	6.3	8.0	8.3	4.3
53	Essential (IS-TF-154)	6.7	5.3	7.3	7.7	4.7
54	06-DUST	6.7	5.3	7.0	6.7	6.0
55	Falcon NG (CE 1)	6.3	8.0	8.7	8.0	6.0
56	JT-42	6.3	7.3	7.7	6.7	2.0
57	PST-5HP	6.3	7.0	7.3	7.3	3.0
58	Titanium LS (MVS-BB-1)	6.3	6.3	8.0	8.3	5.0
59	J-140	6.3	6.3	8.0	8.3	4.0
60	Lindbergh	6.3	6.3	7.7	8.0	3.3
61	MVS-1107	6.3	6.0	7.7	8.3	4.3
62	Traverse SPR (RK-1)	6.3	6.0	7.3	8.7	6.3
63	IS-TF-135	6.3	6.0	6.3	8.0	1.7
64	RAD-TF17	6.3	5.7	6.3	7.7	3.3
65	Col-1	6.3	5.7	6.0	7.3	3.3
66	GE-1	6.3	5.3	6.3	8.0	4.7
67	Biltmore	6.3	5.0	6.7	7.0	4.3
68	Cezanne Rz (LTP-CRL)	6.3	5.0	6.3	8.3	5.0
69	Aristotle	6.0	6.7	7.7	7.0	5.0
70	Skyline	6.0	6.7	7.0	7.7	3.3

(Continued)

Table 6 (continued).

	Cultivar or Selection	Brown Patch[1] June 30 2008	Brown Patch[1] July 8 2008	Brown Patch[1] July 21 2008	Brown Patch[1] Sept. 19 2008	Spring Green-up[2] April 9 2008
71	Darlington (CS-TF1)	6.0	6.0	7.7	8.7	2.0
72	Rembrandt	6.0	6.0	7.0	7.0	7.7
73	JT-45	6.0	5.7	7.0	7.3	3.0
74	BAR Fa 6363	6.0	5.7	6.7	7.7	3.7
75	AST-1	6.0	5.7	6.0	6.7	3.3
76	LS-11	6.0	5.3	7.0	8.3	3.0
77	AST-3	6.0	4.7	7.0	8.0	3.3
78	MVS-341	6.0	4.7	6.7	8.0	5.0
79	JT-36	6.0	4.3	6.3	6.0	2.7
80	IS-TF-152	6.0	4.0	5.7	6.7	1.3
81	J-130	5.7	6.0	7.0	7.3	3.0
82	Pennington's Best	5.7	5.3	7.7	8.3	2.0
83	Kentucky 31	5.7	4.7	7.3	6.3	8.0
84	Justice	5.7	4.7	6.7	8.0	4.7
85	JT-41	5.7	4.0	6.0	7.0	1.3
86	Water Saver	5.3	7.7	8.0	8.7	3.3
87	AST 7001	5.3	6.0	6.3	8.0	2.0
88	JT-33	5.3	5.7	7.3	7.0	2.7
89	BBM	5.3	5.7	6.0	8.0	3.3
90	Rebel IV	5.3	5.3	7.7	7.7	4.3
91	Col-J	5.3	5.0	7.7	8.0	3.0
92	Tulsa Time (Tulsa III)	5.3	5.0	6.0	7.7	3.0
93	KZ-1	5.3	5.0	5.7	6.7	3.0
94	RNP	5.3	4.3	5.7	7.0	2.7
95	PSG-RNDR	5.3	4.3	5.0	6.0	2.3
96	DKS	5.3	4.0	6.3	7.3	3.3
97	IS-TF-138	5.3	3.3	5.3	6.0	1.0
98	Falcon IV	5.3	3.0	6.7	7.7	5.0
99	AST-4	5.0	5.3	6.3	7.7	2.3
100	Magellan	5.0	4.7	7.3	8.7	3.3
101	LS-03	5.0	4.3	7.7	7.0	2.7
102	NA-SS	5.0	4.3	5.0	6.7	2.7
103	AST 7002	5.0	4.0	6.3	8.3	3.7
104	GWTF	5.0	3.7	6.0	6.7	3.0
105	Col-M	5.0	3.7	4.7	6.3	3.0

(Continued)

Table 6 (continued).

	Cultivar or Selection	Brown Patch[1] June 30 2008	Brown Patch[1] July 8 2008	Brown Patch[1] July 21 2008	Brown Patch[1] Sept. 19 2008	Spring Green-up[2] April 9 2008
106	Padre	5.0	3.0	6.7	8.3	5.0
107	KZ-2	5.0	3.0	5.0	7.0	3.0
108	ATF 1247	4.7	4.7	6.7	6.7	4.0
109	STR-8GRQR	4.3	5.0	6.7	8.0	4.0
110	PSG-TTST	4.3	4.3	7.7	8.0	3.7
111	Plato	4.3	4.0	6.3	6.7	4.3
112	DP 50-9411	4.3	3.7	5.3	7.0	4.0
113	Spyder LS (Z-2000)	4.3	3.3	6.0	8.7	3.3
114	AST-2	4.3	3.3	5.3	7.0	2.0
115	Hunter	4.3	3.0	6.3	5.7	3.0
116	Einstein	4.3	3.0	4.7	7.3	5.7
117	BGR-TF2	4.3	3.0	3.7	6.3	2.7
118	312	3.7	2.3	4.0	6.3	4.3
119	AST 7003	3.7	1.3	4.3	6.3	3.7
120	ATF 1328	3.3	1.7	3.3	6.0	4.0
	LSD at 5% =	2.6	3.8	2.5	1.9	1.9

[1]9 = least disease
[2]9 = earliest spring green-up

Table 7. The percent turfgrass canopy (C) and annual bluegrass encroachment into tall fescue cultivars and selections subjected to traffic (wear applied then compaction) stress in October 2007 in a turf trial seeded September 2006 at North Brunswick, NJ. (Includes all entries of the 2006 National Turfgrass Evaluation Program Tall Fescue Test - NTEP.)

		Percent Turfgrass Canopy			
		After Compaction[1]	Recovery[2]		Annual Bluegrass
		(C_{22DAC})	(C_{211DAC})	(C_{238DAC})	Encroachment[3]
	Cultivar or Selection	Nov. 1 2007	May 8 2008	June 4 2008	May 27 2008
1	TG 50-9460	51.7	50.0	73.3	8.3
2	RKCL	51.7	38.3	78.3	7.7
3	CE-2	50.0	56.7	70.0	9.0
4	Falcon NG (CE 1)	50.0	56.7	70.0	8.3
5	NA-BT-1	50.0	48.3	81.7	8.3
6	Spyder LS (Z-2000)	50.0	40.0	71.7	8.0
7	Rebel IV	48.3	58.3	71.7	7.7
8	DP 50-9440	48.3	43.3	76.7	6.7
9	Titanium	46.7	56.7	70.0	8.3
10	Traverse SPR (RK-1)	46.7	55.0	75.0	8.3
11	Finelawn Xpress (RP 2)	46.7	48.3	75.0	8.0
12	Firenza	46.7	45.0	75.0	8.0
13	Wolfpack II (PST-5WMB)	46.7	40.0	75.0	8.0
14	Hemi	45.0	53.3	73.3	8.3
15	CE-4	45.0	46.7	73.3	8.0
16	Turbo	45.0	46.7	73.3	7.3
17	Bullseye	45.0	41.7	78.3	7.3
18	Biltmore	43.3	56.7	75.0	8.0
19	Padre	43.3	55.0	71.7	8.0
20	Shenandoah III (SH 3)	43.3	51.7	76.7	8.0
21	Aggressor (IS-TF-153)	43.3	51.7	75.0	8.7
22	SC-1	43.3	50.0	76.7	9.0
23	SR 8650 (STR-8LMM)	43.3	48.3	75.0	7.3
24	Rembrandt	43.3	48.3	66.7	8.7
25	Mustang 4 (M4)	43.3	45.0	78.3	8.0
26	Monet (LTP-610 CL)	43.3	45.0	73.3	8.3
27	Talledega (RP 3)	43.3	40.0	71.7	8.7
28	J-140	43.3	36.7	65.0	7.7
29	DP 50-9411	43.3	28.3	60.0	7.3
30	Escalade	41.7	51.7	75.0	8.0

(Continued)

Table 7 (continued).

	Cultivar or Selection	Percent Turfgrass Canopy: After Compaction[1] (C_{22DAC}) Nov. 1 2007	Recovery[2] (C_{211DAC}) May 8 2008	Recovery[2] (C_{238DAC}) June 4 2008	Annual Bluegrass Encroachment[3] May 27 2008
31	RK 5	41.7	46.7	73.3	8.7
32	BBM	41.7	46.7	73.3	8.3
33	Falcon V (ATM)	41.7	45.0	80.0	7.7
34	JT-41	41.7	45.0	71.7	8.0
35	Essential (IS-TF-154)	41.7	41.7	71.7	8.3
36	AST-4	41.7	40.0	70.0	7.3
37	RK 6	41.7	38.3	81.7	8.3
38	ATE	41.7	38.3	68.3	8.7
39	STR-8BB5	41.7	36.7	68.3	7.7
40	RAD-TF17	40.0	55.0	66.7	8.3
41	GE-1	40.0	48.3	73.3	8.3
42	Falcon IV	40.0	48.3	73.3	7.7
43	DKS	40.0	46.7	71.7	6.7
44	Einstein	40.0	46.7	66.7	8.0
45	PST-5HP	40.0	45.0	75.0	8.0
46	KZ-2	40.0	45.0	71.7	7.0
47	K06-WA	40.0	43.3	73.3	8.3
48	IS-TF-159	40.0	41.7	66.7	7.7
49	Darlington (CS-TF1)	40.0	38.3	68.3	7.0
50	PSG-85QR	38.3	53.3	70.0	8.0
51	Plato	38.3	51.7	61.7	8.0
52	PSG-82BR	38.3	50.0	71.7	9.0
53	06-DUST	38.3	48.3	68.3	8.0
54	Van Gogh (LTP-RK2)	38.3	46.7	73.3	8.3
55	Speedway (STR-8BPDX)	38.3	45.0	71.7	8.0
56	Tahoe II	38.3	43.3	71.7	7.3
57	MVS-1107	38.3	43.3	68.3	6.7
58	ATF-1199	38.3	40.0	65.0	7.0
59	Cezanne Rz (LTP-CRL)	38.3	38.3	70.0	8.3
60	ATF 1247	38.3	38.3	70.0	7.0
61	Raptor II (MVS-TF-158)	38.3	38.3	68.3	8.3
62	AST-2	38.3	36.7	70.0	6.0
63	Firecracker LS (MVS-MST)	38.3	36.7	68.3	8.7
64	DP 50-9407	38.3	31.7	58.3	7.7
65	IS-TF-138	38.3	30.0	63.3	6.7

(Continued)

Table 7 (continued).

	Cultivar or Selection	Percent Turfgrass Canopy: After Compaction[1] (C_{22DAC}) Nov. 1 2007	Recovery[2] (C_{211DAC}) May 8 2008	Recovery[2] (C_{238DAC}) June 4 2008	Annual Bluegrass Encroachment[3] May 27 2008
66	Lindbergh	36.7	50.0	65.0	8.7
67	JT-45	36.7	48.3	70.0	7.7
68	PSG-TTST	36.7	46.7	63.3	8.0
69	Turbo Rz (Burl-TF8)	36.7	40.0	70.0	7.3
70	AST-1	36.7	40.0	66.7	4.7
71	3rd Millennium SRP	36.7	38.3	73.3	8.0
72	AST 7002	36.7	38.3	70.0	7.3
73	IS-TF-152	36.7	38.3	63.3	7.7
74	Rhambler SRP (Rhambler)	36.7	35.0	66.7	7.3
75	GO-1BFD	35.0	56.7	70.0	7.0
76	Aristotle	35.0	50.0	61.7	7.0
77	Silverado	35.0	46.7	61.7	7.0
78	JT-42	35.0	45.0	68.3	7.3
79	BGR-TF1	35.0	45.0	67.0	7.7
80	Magellan	35.0	45.0	63.3	8.0
81	J-130	35.0	43.3	68.3	7.3
82	RNP	35.0	43.3	65.0	6.3
83	AST-3	35.0	41.7	78.3	7.3
84	BGR-TF2	35.0	41.7	73.3	5.0
85	AST 7003	35.0	40.0	68.3	6.3
86	Jamboree (IS-TF-128)	35.0	40.0	65.0	8.0
87	LS-06	35.0	36.7	71.7	5.7
88	Rocket (IS-TF-147)	35.0	36.7	68.3	8.7
89	Skyline	35.0	36.7	68.3	7.0
90	AST 7001	35.0	36.7	65.0	7.3
91	Col-M	35.0	35.0	66.7	6.7
92	RK 4	35.0	30.0	68.3	7.7
93	Titanium LS (MVS-BB-1)	33.3	53.3	75.0	8.7
94	06-WALK	33.3	46.7	66.7	6.3
95	MVS-341	33.3	41.7	71.7	8.7
96	Col-J	33.3	41.7	66.7	6.7
97	Justice	33.3	40.0	66.7	7.0
98	Tulsa Time (Tulsa III)	33.3	38.3	71.7	7.3
99	Col-1	33.3	38.3	65.0	6.3
100	Fat Cat (IS-TF-161)	33.3	38.3	63.3	8.0

(Continued)

Table 7 (continued).

	Cultivar or Selection	Percent Turfgrass Canopy After Compaction[1] (C_{22DAC}) Nov. 1 2007	Percent Turfgrass Canopy Recovery[2] (C_{211DAC}) May 8 2008	Percent Turfgrass Canopy Recovery[2] (C_{238DAC}) June 4 2008	Annual Bluegrass Encroachment[3] May 27 2008
101	PSG-TTRH	33.3	38.3	63.3	6.7
102	LS-03	33.3	35.0	70.0	6.0
103	NA-SS	31.7	46.7	70.0	7.3
104	STR-8GRQR	31.7	40.0	61.7	7.7
105	GWTF	31.7	38.3	70.0	7.7
106	ATF 1328	31.7	35.0	63.3	7.7
107	IS-TF-135	31.7	26.7	53.3	7.7
108	Toccoa (IS-TF-151)	31.7	23.3	50.0	6.0
109	BAR Fa 6253	30.0	43.3	66.7	8.0
110	Water Saver	30.0	41.7	55.0	8.0
111	Pennington's Best	30.0	40.0	63.3	6.3
112	PSG-RNDR	30.0	38.3	65.0	6.7
113	JT-33	30.0	36.7	65.0	7.3
114	KZ-1	30.0	36.7	63.3	6.0
115	JT-36	30.0	30.0	60.0	7.0
116	312	28.3	40.0	71.7	7.3
117	Hunter	28.3	38.3	65.0	6.3
118	LS-11	28.3	31.7	68.3	6.0
119	BAR Fa 6363	26.7	36.7	61.7	7.7
120	Kentucky 31	21.7	53.3	48.3	7.0
	LSD at 5% =	10.0	13.8	10.0	1.4

[1] Percent (fullness) of turfgrass canopy rated using a 0 to 100% scale (0 = absence of a turfgrass canopy to 100 = full canopy) at 22 days after compaction (C_{22DAC}).

[2] Recovery assessed as percent (fullness) of turfgrass canopy using a 0 to 100% scale (0 = absence of a turfgrass canopy to 100 = full canopy) at 211 and 236 days after compaction (C_{211DAC} and C_{239DAC}, respectively).

[3] 9 = least annual bluegrass (*Poa annua* L.) encroachment.

Table 8. Percent turfgrass canopy and visual ratings of tall fescue cultivars and selections subjected to traffic stresses in July 2008 in a turf trial seeded in September 2006 at North Brunswick, NJ. (Includes all entries of the 2006 National Turfgrass Evaluation Program Tall Fescue Test - NTEP.)

		Percent Turfgrass Canopy					Turf Quality	
		During Wear (Number of Passes)[1]			Recovery[2]			
	Cultivar or Selection	16 (C_W) July 23 2008	8 (C_{+8}) July 22 2008	0 (C_{BW}) July 21 2008	(C_{12DAW}) Aug. 4 2008	(C_{60DAC}) Oct. 3 2008	After Wear[3] July 25 2008	After Traffic[4] Aug. 13 2008
1	Falcon V (ATM)	80.0	91.7	91.7	75.0	83.3	8.0	6.0
2	Shenandoah III (SH 3)	76.7	83.3	85.0	73.3	81.7	7.0	4.7
3	NA-BT-1	73.3	91.7	95.0	73.3	83.3	7.0	5.7
4	RK 6	73.3	85.0	88.3	70.0	81.7	7.3	6.0
5	Talledega (RP 3)	73.3	83.3	85.0	66.7	81.7	7.0	5.0
6	Hemi	73.3	85.0	90.0	66.7	75.0	7.0	5.3
7	SC-1	71.7	76.7	76.7	60.0	65.0	7.0	3.7
8	Wolfpack II (PST-5WMB)	70.0	85.0	86.7	73.3	75.0	7.0	5.7
9	Jamboree (IS-TF-128)	70.0	78.3	81.7	66.7	80.0	7.3	5.3
10	Speedway (STR-8BPDX)	68.3	83.3	85.0	71.7	80.0	6.3	5.3
11	Turbo	68.3	80.0	80.0	70.0	85.0	6.7	4.3
12	RK 5	68.3	81.7	86.7	68.3	85.0	7.0	5.3
13	Bullseye	68.3	80.0	81.7	66.7	83.3	7.7	4.3
14	Aggressor (IS-TF-153)	68.3	78.3	81.7	66.7	80.0	6.3	5.0
15	CE-2	68.3	80.0	81.7	66.7	80.0	6.3	5.7
16	K06-WA	68.3	78.3	80.0	65.0	76.7	6.0	4.7
17	Finelawn Xpress (RP 2)	68.3	80.0	83.3	61.7	73.3	6.0	5.0
18	Raptor II (MVS-TF-158)	66.7	80.0	85.0	68.3	80.0	6.7	5.7
19	Falcon NG (CE 1)	66.7	78.3	81.7	68.3	75.0	7.3	5.7
20	IS-TF-138	66.7	80.0	80.0	65.0	76.7	6.7	5.0

(Continued)

Table 8 (continued).

	Cultivar or Selection	Percent Turfgrass Canopy: During Wear (Number of Passes)[1] 16 (C_W) July 23 2008	8 (C_{+8}) July 22 2008	0 (C_{BW}) July 21 2008	Recovery[2] (C_{12DAW}) Aug. 4 2008	(C_{60DAC}) Oct. 3 2008	Turf Quality: After Wear[3] July 25 2008	After Traffic[4] Aug. 13 2008
21	SR 8650 (STR-8LMM)	65.0	80.0	80.0	73.3	78.3	6.3	5.7
22	Traverse SPR (RK-1)	65.0	78.3	80.0	66.7	76.7	6.3	4.7
23	PSG-85QR	65.0	80.0	80.0	65.0	75.0	6.3	5.3
24	DP 50-9440	65.0	85.0	85.0	63.3	88.3	5.7	4.0
25	TG 50-9460	65.0	83.3	86.7	63.3	85.0	7.0	5.7
26	RK 4	65.0	81.7	85.0	63.3	83.3	5.7	5.3
27	Essential (IS-TF-154)	65.0	78.3	78.3	58.3	76.7	5.0	4.7
28	Mustang 4 (M4)	63.3	75.0	75.0	68.3	76.7	6.0	5.3
29	BGR-TF1	63.3	76.7	76.7	68.3	75.0	6.7	4.7
30	Van Gogh (LTP-RK2)	63.3	76.7	81.7	58.3	80.0	5.7	4.3
31	Monet (LTP-610 CL)	61.7	80.0	81.7	65.0	80.0	5.7	5.7
32	ATE	61.7	76.7	81.7	65.0	80.0	6.3	4.3
33	Firenza	61.7	80.0	80.0	63.3	75.0	5.7	5.0
34	JT-42	61.7	70.0	71.7	61.7	71.7	6.0	5.3
35	DP 50-9407	61.7	80.0	81.7	60.0	86.7	5.7	4.0
36	Rebel IV	61.7	80.0	83.3	60.0	71.7	5.7	5.0
37	RKCL	61.7	81.7	80.0	53.3	81.7	5.3	3.7
38	IS-TF-159	60.0	78.3	76.7	63.3	75.0	5.3	5.0
39	Firecracker LS (MVS-MST)	60.0	78.3	78.3	61.7	80.0	5.3	3.7
40	Cezanne Rz (LTP-CRL)	60.0	73.3	73.3	60.0	70.0	5.0	4.7

(Continued)

Table 8 (continued).

	Cultivar or Selection	Percent Turfgrass Canopy: During Wear (Number of Passes)[1] 16 (C_W) July 23 2008	8 (C_{+8}) July 22 2008	0 (C_{BW}) July 21 2008	Recovery[2] (C_{12DAW}) Aug. 4 2008	(C_{60DAC}) Oct. 3 2008	Turf Quality: After Wear[3] July 25 2008	After Traffic[4] Aug. 13 2008
41	Rhambler SRP (Rhambler)	60.0	80.0	81.7	58.3	76.7	5.7	4.0
42	Skyline	60.0	73.3	78.3	58.3	68.3	6.0	4.3
43	Toccoa (IS-TF-151)	60.0	68.3	70.0	55.0	60.0	6.3	4.3
44	Titanium	58.3	76.7	78.3	66.7	70.0	5.3	5.7
45	J-140	58.3	76.7	78.3	63.3	80.0	5.7	5.0
46	RAD-TF17	58.3	76.7	78.3	63.3	68.3	5.3	4.7
47	Spyder LS (Z-2000)	58.3	73.3	83.3	61.7	73.3	6.3	4.3
48	NA-SS	58.3	70.0	73.3	55.0	63.3	5.0	4.0
49	IS-TF-152	56.7	70.0	71.7	58.3	75.0	5.3	4.3
50	Turbo Rz (Burl-TF8)	56.7	71.7	76.7	56.7	73.3	5.0	4.3
51	BAR Fa 6253	56.7	71.7	71.7	55.0	71.7	5.0	3.7
52	3rd Millennium SRP	55.0	76.7	81.7	61.7	75.0	5.3	4.3
53	PSG-82BR	55.0	75.0	76.7	61.7	73.3	5.3	5.0
54	Rocket (IS-TF-147)	55.0	73.3	76.7	60.0	70.0	6.7	4.0
55	MVS-1107	55.0	80.0	81.7	58.3	73.3	5.0	5.7
56	Biltmore	55.0	70.0	71.7	56.7	68.3	4.7	4.7
57	PST-5HP	53.3	70.0	71.7	61.7	75.0	5.0	5.0
58	Titanium LS (MVS-BB-1)	53.3	76.7	76.7	60.0	73.3	5.3	4.3
59	STR-8BB5	53.3	71.7	76.7	55.0	75.0	5.0	3.7
60	MVS-341	53.3	71.7	78.3	50.0	73.3	4.7	3.7

(Continued)

Table 8 (continued).

	Cultivar or Selection	Percent Turfgrass Canopy: During Wear (Number of Passes)[1] 16 (C_W) July 23 2008	8 (C_{+8}) July 22 2008	0 (C_{BW}) July 21 2008	Recovery[2] (C_{12DAW}) Aug. 4 2008	(C_{60DAC}) Oct. 3 2008	Turf Quality: After Wear[3] July 25 2008	After Traffic[4] Aug. 13 2008
61	Fat Cat (IS-TF-161)	53.3	66.7	70.0	50.0	70.0	4.3	4.0
62	Col-M	53.3	70.0	70.0	50.0	70.0	4.3	4.0
63	Justice	53.3	71.7	76.7	48.3	73.3	5.0	4.3
64	Escalade	51.7	71.7	76.7	55.0	76.7	5.0	5.0
65	AST-3	51.7	68.3	76.7	55.0	73.3	5.0	4.7
66	JT-36	51.7	71.7	75.0	55.0	70.0	4.3	5.0
67	Tahoe II	51.7	70.0	73.3	53.3	78.3	4.7	4.3
68	KZ-1	51.7	66.7	70.0	46.7	73.3	4.7	4.0
69	JT-33	50.0	70.0	71.7	55.0	70.0	5.0	4.3
70	LS-11	50.0	71.7	75.0	48.3	73.3	4.7	4.3
71	BBM	50.0	68.3	68.3	48.3	71.7	4.7	3.3
72	Col-1	50.0	70.0	71.7	48.3	70.0	4.0	4.0
73	PSG-TTRH	50.0	66.7	70.0	48.3	68.3	5.0	4.0
74	CE-4	50.0	65.0	66.7	48.3	68.3	4.3	3.7
75	ATF-1199	50.0	71.7	71.7	46.7	63.3	4.7	3.7
76	LS-03	50.0	66.7	68.3	45.0	75.0	4.3	3.7
77	JT-45	48.3	70.0	71.7	55.0	73.3	4.7	4.0
78	IS-TF-135	48.3	63.3	70.0	53.3	66.7	4.7	3.7
79	Lindbergh	48.3	61.7	63.3	50.0	66.7	4.0	4.3
80	LS-06	48.3	68.3	70.0	48.3	71.7	4.3	3.7

(Continued)

Table 8 (continued).

		Percent Turfgrass Canopy					Turf Quality	
		During Wear (Number of Passes)[1]			Recovery[2]			
	Cultivar or Selection	16 (C_W) July 23 2008	8 (C_{+8}) July 22 2008	0 (C_{BW}) July 21 2008	(C_{12DAW}) Aug. 4 2008	(C_{60DAC}) Oct. 3 2008	After Wear[3] July 25 2008	After Traffic[4] Aug. 13 2008
81	06-DUST	48.3	65.0	70.0	46.7	71.7	4.0	3.7
82	Darlington (CS-TF1)	48.3	70.0	75.0	46.7	66.7	4.7	3.7
83	AST 7002	48.3	70.0	71.7	41.7	70.0	4.3	4.3
84	JT-41	46.7	63.3	71.7	51.7	73.3	4.0	4.0
85	06-WALK	46.7	63.3	61.7	48.3	71.7	3.7	4.3
86	BGR-TF2	46.7	68.3	70.0	48.3	71.7	4.0	4.0
87	DP 50-9411	46.7	61.7	63.3	45.0	73.3	4.0	3.3
88	GE-1	46.7	66.7	66.7	43.3	68.3	3.7	3.0
89	BAR Fa 6363	46.7	63.3	63.3	41.7	61.7	4.0	3.7
90	STR-8GRQR	45.0	65.0	70.0	48.3	71.7	4.3	4.3
91	Magellan	45.0	70.0	71.7	45.0	63.3	4.0	4.0
92	312	45.0	63.3	66.7	43.3	66.7	3.7	3.7
93	RNP	43.3	65.0	68.3	48.3	70.0	3.7	4.0
94	Einstein	43.3	65.0	68.3	46.7	66.7	3.7	3.0
95	Padre	43.3	68.3	75.0	46.7	65.0	4.0	3.3
96	Falcon IV	43.3	68.3	70.0	45.0	65.0	4.0	3.7
97	Pennington's Best	43.3	60.0	60.0	45.0	60.0	3.7	3.7
98	AST-4	43.3	71.7	73.3	43.3	65.0	4.0	3.3
99	KZ-2	43.3	60.0	63.3	41.7	63.3	3.0	3.0
100	PSG-RNDR	41.7	66.7	68.3	45.0	65.0	4.3	3.7

(Continued)

Table 8 (continued).

		Percent Turfgrass Canopy					Turf Quality	
		During Wear (Number of Passes)[1]			Recovery[2]			
	Cultivar or Selection	16 (C_W) July 23 2008	8 (C_{+8}) July 22 2008	0 (C_{BW}) July 21 2008	(C_{12DAW}) Aug. 4 2008	(C_{60DAC}) Oct. 3 2008	After Wear[3] July 25 2008	After Traffic[4] Aug. 13 2008
101	GO-1BFD	41.7	63.3	68.3	43.3	73.3	4.0	3.7
102	Tulsa Time (Tulsa III)	41.7	65.0	68.3	43.3	71.7	3.3	3.0
103	GWTF	41.7	63.3	66.7	41.7	68.3	3.3	3.3
104	DKS	41.7	61.7	65.0	40.0	70.0	3.3	3.3
105	ATF 1247	40.0	63.3	66.7	45.0	63.3	3.0	3.7
106	Silverado	40.0	55.0	60.0	43.3	60.0	3.0	3.3
107	AST 7003	40.0	63.3	71.7	41.7	70.0	3.0	3.7
108	AST 7001	40.0	60.0	63.3	41.7	66.7	3.0	3.0
109	Plato	40.0	58.3	58.3	41.7	60.0	3.0	3.7
110	Col-J	40.0	63.3	63.3	40.0	70.0	3.0	3.3
111	AST-2	40.0	60.0	61.7	40.0	70.0	3.7	3.0
112	Water Saver	38.3	60.0	63.3	46.7	61.7	3.7	4.0
113	Hunter	38.3	60.0	65.0	41.7	70.0	3.0	3.3
114	Rembrandt	38.3	63.3	71.7	41.7	70.0	3.3	3.7
115	J-130	38.3	61.7	68.3	36.7	63.3	3.3	2.7
116	AST-1	36.7	56.7	63.3	41.7	63.3	3.0	2.7
117	Aristotle	36.7	58.3	61.7	35.0	58.3	2.7	3.7
118	PSG-TTST	35.0	53.3	65.0	36.7	60.0	2.3	3.3
119	ATF 1328	33.3	60.0	63.3	31.7	55.0	2.0	2.3
120	Kentucky 31	16.7	38.3	53.3	23.3	48.3	1.0	1.7

(Continued)

Table 8 (continued).

Cultivar or Selection	Percent Turfgrass Canopy: During Wear (Number of Passes)[1]: 16 (C_W) July 23 2008	8 (C_{+8}) July 22 2008	0 (C_{BW}) July 21 2008	Recovery[2]: (C_{12DAW}) Aug. 4 2008	(C_{60DAC}) Oct. 3 2008	Turf Quality: After Wear[3] July 25 2008	After Traffic[4] Aug. 13 2008
LSD at 5% =	19.7	13.9	12.5	19.8	13.7	2.7	2.1

[1] Percent (fullness) of turfgrass canopy rated using a 0 to 100% scale (0 = absence of a turfgrass canopy to 100 = full canopy) after 0, 8, and 16 passes with the wear simulator (C_{BW}, C_{+8}, and C_W, respectively).

[2] Recovery from wear and traffic assessed as percent (fullness) of turfgrass canopy using a 0 to 100% scale (0 = absence of a turfgrass canopy to 100 = full canopy) 12 days after wear (C_{12DAW}) and 60 days after compaction (C_{60DAC}).

[3] 9 = best quality (fullest turfgrass canopy and most uniform ground cover after wear).

[4] 9 = best traffic quality (fullest turfgrass canopy and most uniform ground cover after wear + compaction).

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