

STATEMENT OF
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NATIONAL TURFGRASS EVALUATION PROGRAM

IN SUPPORT OF RESTORATION OF
FUNDING FOR THE NATIONAL
TURFGRASS EVALUATION PROGRAM AND THE FULL-TIME
TURFGRASS RESEARCH SCIENTIST IN THE BUDGET
FOR THE AGRICULTURAL RESEARCH SERVICE (ARS)

&

A REQUEST FOR FUNDING SUPPORT FOR THE
NATIONAL TURFGRASS RESEARCH INITIATIVE

PRESENTED TO

THE APPROPRIATIONS SUBCOMMITTEE ON
AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG
ADMINISTRATION AND RELATED AGENCIES

UNITED STATES SENATE

APRIL 12, 2005

Mr. Chairman and Members of the Subcommittee:

On behalf of the National Turfgrass Evaluation Program (NTEP), I appreciate the opportunity to present to you the turfgrass industry's need and justification for continuation of the \$490,000 appropriated in the fiscal year 2005 budget for turfgrass research within the Agricultural Research Service (ARS) at Beltsville, MD. Secondly, we are asking for twelve individual research positions of \$450,000 each. This amount is being requested by House members in individual districts where the positions are located. We appreciate the support of research funding at Logan, UT (\$125,000) and Beaver, WV (\$150,000) provided by the committee in FY05 and request that funding be increased to \$450,000 for each position in FY06.

1) Justification of \$490,000 Appropriation Request for the existing ARS Scientist Position and related support activities

NTEP and the turfgrass industry are requesting the Subcommittee's support for \$490,000 to continue funding for the full-time scientist staff position within the USDA, ARS at Beltsville, MD, focusing on turfgrass research, that was appropriated in the fiscal year 2005 budget, and in the three previous budget cycles.

Turfgrass provides multiple benefits to society including child safety on athletic fields, environmental protection of groundwater, reduction of silt and other contaminants in runoff, and green space in home lawns, parks and golf courses. Therefore, by cooperating with NTEP, USDA has a unique opportunity to take positive action in support of the turfgrass industry. While the vast majority of the USDA's funds have been and will continue to be directed toward traditional "food and fiber" segments of U.S. agriculture, it is important to note that turfgrasses (e.g., sod production) are defined as agriculture in the Farm Bill and by many other departments and agencies. It should also be noted that the turfgrass industry is the fastest growing segment of U.S. agriculture, while it receives essentially no federal support. There are no subsidy programs for turfgrass, nor are any desired.

For the past seventy years, the USDA's support for the turfgrass industry has been modest at best. The turfgrass industry's rapid growth, importance to our urban environments, and impact on our daily lives warrant more commitment and support from USDA.

A new turfgrass research scientist position within USDA/ARS was created by Congress in the FY2001 budget. Additional funding was added in FY2002 with the total at \$490,000. A research scientist was hired, and is now working at the ARS, Beltsville, MD center. A research plan was developed and approved by ARS. This scientist has used the funding for a full-time technician, equipment and supplies to initiate the research plan and for collaborative research with universities. We have an excellent scientist in place and he is making good progress in establishing a solid program. At this point, losing the funding for the position would be devastating to the turf industry, as significant research has begun.

2) **Justification of funding for 12 ARS scientist positions at ARS installations around the U.S. @ \$450,000 each; Total: \$5,400,000 Appropriation Request for the first installment on the National Turfgrass Research Initiative:**

The turfgrass industry also requests that the Subcommittee appropriate an additional \$5,400,000 for the National Turfgrass Research Initiative. This Initiative has been developed by USDA/ARS in partnership with the turfgrass industry. We are asking for twelve priority research positions at nine locations across the U.S. These twelve positions address the most pressing research needs, namely water use/efficiency and environmental issues. \$450,000 is being requested for each location.

The USDA needs to initiate and maintain ongoing research on turfgrass development and improvement for the following reasons:

1. The value of the turfgrass industry in the U.S. is **\$40 billion annually**. There are an estimated **50,000,000** acres of turfgrass in the U.S. Turfgrass is the number one or two agricultural crop in value and acreage in many states (e.g., MD, PA, FL, NJ, NC).
2. As our society becomes more urbanized, the acreage of turfgrass will increase significantly. In addition, state and local municipalities are requiring the reduction of water, pesticides and fertilizers on turfgrass. However, demand on recreational facilities will increase while these facilities will still be required to provide safe turfgrass surfaces.
3. Currently, the industry spends about \$10 million annually on turfgrass research. However, private and university research programs do not have the time nor resources to identify completely new sources of beneficial genes for stress tolerance. ARS turfgrass scientists will enhance the ongoing research currently underway in the public and private sectors.
4. Water management is a key component of healthy turf and has direct impact on nutrient and pesticide losses into the environment. Increasing demands and competition for potable water make it necessary to use water more efficiently. **Also, drought situations in many regions have limited the water available and, therefore, have severely impacted the turf industry as well as homeowners and young athletes.** Therefore, new and improved technologies are needed to monitor turf stresses and to schedule irrigation to achieve the desired quality. Technologies are also needed to more efficiently and uniformly irrigate turfgrasses. Drought tolerant grasses need to be developed. In addition, to increase water available for irrigation, waste water (treated and untreated) must be utilized. Some of these waste waters contain contaminants such as pathogens, heavy metals, and organic compounds. The movement and accumulation of these contaminants in the environment must be determined.
5. USDA conducted significant turfgrass research from 1920-1988. However, since 1988, no full-time scientist has been employed by USDA, Agricultural Research Service (ARS) to conduct turfgrass research specifically, until the recently appropriated funds become available.

The turfgrass industry has met on several occasions with USDA/ARS officials to discuss the new turfgrass scientist positions, necessary facilities, and future research opportunities. In January 2002, ARS held a customer workshop to gain valuable input from turfgrass researchers, golf course superintendents, sod producers, lawn care operators, athletic field managers and others on the research needs of the turfgrass industry. As a result of the workshop, ARS and the turfgrass industry have developed the National Turfgrass Research Initiative. The highlights of this strategy are as follows:

A NATIONAL STRATEGY FOR ARS TURFGRASS RESEARCH

Research Objectives: Conduct long-term basic and applied research to provide knowledge, decision-support tools and plant materials to aid in designing, implementing, monitoring and managing economically and environmentally sustainable turfgrass systems including providing sound scientifically based information for use in the regulatory process.

Research Focus: To make a significant contribution in developing and evaluating sustainable turfgrass systems, ARS proposes developing research programs in six major areas:

Component I. Water Management Strategies and Practices

Rationale: New and improved technologies are needed to monitor turf stresses and to schedule irrigation to achieve desired turf quality but with greater efficiency or using other water sources.

Component II. Germplasm: Collection, Enhancement and Preservation

Rationale: Grasses that better resist diseases, insects, drought, traffic, etc. are desperately needed. Also, a better understanding of the basic biology of turfgrass species is essential.

Component III. Improvement of Pest Management Practices

Rationale: New tools and management practices are needed to adequately control weeds, diseases, insects and vertebrate pests while reducing input costs and pesticide use.

Component IV. The Environment: Understanding and Improvement of Turfgrass' Role

Rationale: The need is great to quantify the contribution of turf systems to water quality and quantify of vital importance in addressing the potential role of turf systems in environmental issues.

Component V. Enhancement of Soil and Soil Management Practices

Rationale: Research is needed to characterize limitations to turf growth and development in less than optimum soils and to develop cost-effective management practices to overcome these limitations.

Component VI. Integrated Turf Management

Rationale: To develop needed tools for turf managers to select the best management practices for economic sustainability as well as environmental protection.

ARS, as the lead agency at USDA for this initiative, has graciously devoted a significant amount of time to the effort. Like the industry, ARS is in this research endeavor for the long-term. To ARS' credit, the agency has committed staff, planning and technical resources to this effort. However, despite ARS' effort to include a budget request in the overall USDA budget request, USDA—at higher levels—has not seen fit to include this research as a priority. Thus, the industry is left with no alternative but to come directly to Congress for assistance through the appropriations process.

The role and leadership of the federal government and USDA in this research are justifiable and grounded in solid public policy rationale. ARS is poised and prepared to work with the turfgrass industry in this major research initiative. However, ARS needs additional resources to undertake this mission.

The turfgrass industry is very excited about this new proposal and wholeheartedly supports the efforts of ARS. Since the customers at the workshop identified turfgrass genetics/germplasm and water quality/use as their top priority areas for ARS research, for fiscal year 2006, the turfgrass industry requests that the following positions be established within USDA/ARS:

<u>Position 1.</u>	
Component I: Water: Agricultural Engineer – Irrigation	
Southwest – Phoenix, AZ	\$450,000
<u>Position 2.</u>	
Component II: Germplasm: Molecular Biologist	
Southwest – Lubbock, TX	\$450,000
<u>Position 3.</u>	
Component IV: Environment: Agricultural Engineer – Fate & Transport	
Southwest – Phoenix, AZ	\$450,000
<u>Position 4.</u>	
Component I: Water: Stress Physiologist – Salinity	
Southwest - Riverside, CA	\$450,000
<u>Position 5.</u>	
Component II: Germplasm: Geneticist – Stress	
Transition Zone – Beltsville, MD	\$450,000
<u>Position 6.</u>	
Component I: Water: Agricultural Engineer - Irrigation	
Transition Zone – Florence, SC	\$450,000
<u>Position 7.</u>	
Component IV: Environment: Agricultural Engineer – Fate & Transport	
Northeast - University Park, PA	\$450,000
<u>Position 8.</u>	
Component III: Pest Management: Weed Scientist	
Northeast – University Park, PA	\$450,000
<u>Position 9.</u>	
Component IV: Environment: Agricultural Engineer – Fate & Transport	
North Central – Ames, IA	\$450,000
<u>Position 10.</u>	
Component III: Pest Management: Pathologist	
Transition Zone – Beltsville, MD	\$450,000
<u>Position 11.</u>	
Component II: Germplasm: Geneticist – Biodiversity	
Upper West – Logan, UT	\$450,000
<u>Position 12.</u>	
Component III: Pest Management: Entomologist	
North Central – Wooster, OH	\$450,000
TOTAL	\$5,400,000

For this research we propose an ARS-University partnership, with funding allocated to ARS for in-house research as well as in cooperation with university partners. For each of the individual scientist positions, we are requesting \$300,000 for each ARS scientist position with an additional \$150,000 attached to each position to be distributed to university partners, for a total of \$450,000 per position. We are also asking that the funding be directed to ARS and then distributed by ARS to those university partners selected by ARS and industry representatives.

In FY05, in addition to restoring most of the \$490,000 appropriated in FY04, the Subcommittee generously provided additional funding for turfgrass research at Beaver, WV (\$150,000) and Logan, UT (\$125,000). We appreciate the support of the Subcommittee for this new funding in FY05 and ask for your continued support of that funding in FY06 at \$450,000 per location.

In addition, you will be receiving Member requests for funding of each of the twelve positions described above. Therefore, we appreciate your strong consideration of each individual member request for the turfgrass research position in his or her respective congressional district.

In conclusion, on behalf of the National Turfgrass Evaluation Program and the turfgrass industry across America, I respectfully request that the Subcommittee continue the funding appropriated in fiscal year 2005 for Beltsville, MD, (\$490,000), Beaver, WV (\$150,000) and Logan, UT (\$125,000) within the Agricultural Research Service. I also request that the Subcommittee appropriate an additional \$5,400,000 for twelve new turfgrass scientist positions around the country, with \$450,000 provided for each location.

Thank you very much for your assistance and support.