

STATEMENT OF
KEVIN N. MORRIS, EXECUTIVE DIRECTOR
NATIONAL TURFGRASS EVALUATION PROGRAM

IN SUPPORT OF RESTORATION OF
FUNDING FOR 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, AND RELATED AGENCIES

UNITED STATES SENATE

APRIL 5, 2006

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 2006 budget for turfgrass research within the Agricultural Research Service (ARS) at Beltsville, MD. Secondly, we ask that the committee support and accept the \$1,880,000 for Drought Mitigation in the President's budget request. This funding will be used by ARS to conduct turfgrass water conservation and salinity research at Phoenix, AZ and Riverside, CA. Thirdly, to implement the most critical needs within the National Turfgrass Research Initiative, we are asking for five individual research positions of \$450,000 each. This amount is being requested by senators in the states where the positions are located. We appreciate the support of research funding at Beaver, WV (\$330,000) provided by the committee in FY06 and request that funding be restored in FY07. All funding provided by the Committee is requested to go directly to ARS/Beltsville, not the industry per se.

1) Restoration of funding for the existing ARS Scientist Position and related support activities at Beltsville, MD (\$490,000)

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 provided by the Committee in the fiscal year 2006 budget, and in the four previous budget cycles. We consider this funding our Congressional 'baseline', i.e. that funding which is central to and critical for the mission of the National Turfgrass Research Initiative. We are very grateful for this support and hope the Committee will continue this funding.

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) Support the President's budget request for Drought Mitigation research as proposed by ARS (See ARS Explanatory Notes, pages 10-82, 10-83) (\$1,880,000)

The turfgrass industry is excited that for the *first* time, the President's budget contains funding for turfgrass research within ARS. This funding will be used to hire scientists in two very important locations, Riverside, CA and Phoenix, AZ, focusing on water conservation, wastewater reuse and salinity research. These issues are the most critical research needs for the survival of the turf industry. Following is a brief description of the research that ARS will conduct with this funding:

ARS will:

Develop Technology and Management Systems to Use Non-Potable Water to Reduce Agriculture's Vulnerability to Drought (\$1,880,000 total). In the process, ARS will develop systems to safely reuse wastewater and low-quality water as a means of irrigating agricultural, horticultural and turf-based enterprises in an environmentally and economically sustainable manner

As noted in USDA's Explanatory Notes accompanying this budget request, this funding will be directed to the following two critical locations:

Phoenix, AZ, (\$940,000)

The U.S. Water Conservation Lab in Phoenix will determine the on-site impacts and movement in the air, soil, plant, and ground water of biological and chemical substances contained in treated and untreated waste water used for irrigation of turfgrass. They will also develop irrigation technologies and management systems to mitigate the impact of elevated levels of these compounds and nutrients when wastewater is used in the production of turf and specialty crops.

Riverside, CA, (\$940,000)

This research will be conducted at the world-renowned U.S. Salinity Lab. The Riverside lab will focus on the development of new irrigation technologies and systems to either mitigate or manage the effect of saline irrigation on the production of turf and specialty crops.

3) Request funding of Congressional earmarks for five ARS scientist positions at four ARS installations @ \$450,000 each (Total: \$2,250,000)

The turfgrass industry also requests that the Subcommittee appropriate an additional \$2,250,000 for the National Turfgrass Research Initiative. This Initiative has been developed by USDA/ARS in partnership with the turfgrass industry. We are asking for five priority research positions at four locations across the U.S. These five 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 itself spends about \$10 million annually on applied and proprietary turfgrass research. However, private and university research programs do not have the time nor the resources to conduct basic research and 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. Because of its mission to conduct the nation's research for agricultural commodities, ARS is the proper delivery system for this research.
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 became available.

ARS and the turfgrass industry enjoy a special, collaborative relationship, and have even entered into a cooperative Memorandum of Understanding (MOU). The turfgrass industry has met on numerous 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:

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. This year is the first time ARS has been able to include some funding in the President’s budget for the Turfgrass Research Initiative. However, there are so many issues and needs, that the industry is desperate for answers. Thus, to address the critical research needs, 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 2007, the turfgrass industry requests that the following positions be established within USDA/ARS:

<u>Position 1.</u>	
Component II: Germplasm: Molecular Biologist	
Southwest – Lubbock, TX	\$450,000
<u>Position 2.</u>	
Component I: Water: Agricultural Engineer - Irrigation	
Transition Zone – Florence, SC	\$450,000
<u>Position 3.</u>	
Component IV: Environment: Agricultural Engineer – Fate & Transport	
Northeast - University Park, PA	\$450,000
<u>Position 4.</u>	
Component III: Pest Management: Weed Scientist	
Northeast – University Park, PA	\$450,000
<u>Position 5.</u>	
Component II: Germplasm: Geneticist – Biodiversity	
Upper West – Logan, UT	\$450,000
TOTAL	\$2,250,000

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.

4) Request restoration of funding for the ARS lab in Beaver, WV that was appropriated in FY06 (\$330,000)

In the last two fiscal years, the Subcommittee has generously provided funding for turfgrass research at the Appalachian Farming Systems Research Center in Beaver, WV. The Subcommittee allocated \$150,000 in FY05 and an additional \$180,000 in FY06, bringing the total to \$330,000. As the Beaver lab has expertise in soils research, the turf industry has embraced this funding and the research possibilities. The turf industry is now

working with the lab to construct a research program on soil issues that affect turfgrass production. This research fits very nicely within the framework of the National Turfgrass Research Initiative. Therefore, we appreciate the support of the Subcommittee for this new funding in the last two fiscal years and ask for your continued support of that funding in FY07.

In addition, the Committee should be receiving Member requests for funding of each of the five positions described above. We appreciate your strong consideration of each individual member request for the turfgrass research position in his or her respective state.

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 2006 for Beltsville, MD, (\$490,000) and Beaver, WV (\$330,000) within the Agricultural Research Service. I also request that the committee support the President's budget request of \$1,880,000 for Drought Mitigation. Finally, I request that the Subcommittee appropriate an additional \$2,250,000 for five new turfgrass scientist positions around the country, with \$450,000 provided for each location.

Thank you very much for your assistance and support.