Turfgrass Soil and Water Management Program



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s with life, some things are changing and some stay the same. Changes include students graduating and a technician leaving. The technician in my program, Joe Deforest, recently took a job as the assistant golf course superintendent at the Lake Placid Club. Joe spent two years with us completing his B.S. degree in Turfgrass Management before working at the Robert Trent Jones Golf Course at Cornell prior to his time as a technician. We are certainly missing him this summer!

This spring two turfgrass management students graduated and have entered the work force. Peter Vidulich of Tribes Hill, NY, won several scholarships this year, including the Linder Award from Cornell, and was elected a member of Pi Alpha Xi, the honorary national society for Floriculture and Ornamental Horticulture. Peter is the second assistant golf superintendent at Piping Rock Golf Club on Long Island. Edward Dubisz of Buffalo, also a Linder Award winner. is the assistant golf superintendent at Medford Village Country Club in southern New Jersey. Ed also completed an undergraduate research project during the spring semester to determine the impact that the non-organic fraction of natural organic fertilizers and pesticides have on the saturated water flow rate of a typical sand-peat root zone for putting greens. A lab study indicated that as little as 10 applications of natural organic fertilizer non-organic fraction (ash) can reduce the saturate flow rate by 15 to 25% and as much as 66% reduction after 100 applications. We will be investigating possible funding sources to further these studies under field conditions.

Research this summer focused on pesticide and nutrient leaching from golf greens, soil amendments and turf as a phyto-remediation tool. Leaching studies involved developing bestmanagement practices to reduce pesticide leaching. Previous research of ours has shown that during the establishment period (until the turf is dense and organic matter is accumulating), pesticides are much more likely to leach. One type of pest problem that occurs during establishment is damping off disease caused by Pythium species. This project, in conjunction with Frank Rossi and staff, will determine if seed treatment is effective in reducing the amount of pesticide (and nitrate) leaching from sand and sandy loam greens. Another study is determining if a nutrient loaded natural zeolite (Zeopro) amended sand green will have less nitrate, phosphorus and potassium leaching than a sand-peat green. Petri Anton, an M.S. student from the United Kingdom, is conducting additional soil amendment research involving the determination of the optimum cation ion exchange capacity of sand based greens. M.S. student Ruby Beil is studying the ability of tall fescue to clean up lead contaminated soil by accumulating lead in the shoots and roots as a low cost way of cleaning up toxic waste sites.

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