

Outstanding Achievement - Academia/Research

Booth, Terrance D.

Dr. Terrance Booth is one of those rare scientists who has taken his knowledge of rangeland science, and applied it to the development of new knowledge and theory which has greatly benefited many whose careers involve the management of western rangelands. Starting out in seedbed ecology and reclamation research, Terry made several substantive advances that have affected or changed industry standards in the processing of seeds, in the reclamation of disturbed lands, and in the development of a new cultivar. He advanced the science of seedbed ecology by elucidating the physical, physiological and morphological reactions of seeds in processing and priming, and the consequences for seedling vigor and plant establishment. His research pointed out the need to fully understand for all relevant species their seedbed ecology, including all diaspore functions that contribute to seedling establishment. He also pointed out the need to understand seed processing in order to develop the most economical and effective seed handling protocols.



More recently, but building on work begun as a graduate student under Dr. Paul Tueller, Dr. Booth created an aerial survey system that fully addresses the rangeland monitoring problem defined by Brady et al., who in 1995, commented in a *Journal of Range Management* article, "The monitoring problem in natural resource management is one of how to design ...economical inventory methods that will detect ecologically important vegetation changes with acceptable error rates." The technical problems and obstacles in this accomplishment were multiple, substantive, and would be to many, defeating. But Terry persevered, and today has developed an aerial monitoring system that numerous groups, including organizations like the BLM, USDA-ARS, the Northern Nevada Stewardship Group, Nevada Bighorn's Unlimited and Bitterroot Restoration Inc. see as a solution to the problem in monitoring vast acreages of rangelands.

In summary, Dr. Terry Booth has been a dedicated and accomplished rangeland scientist who has used his scientific skills and knowledge to develop critical tools that rangeland managers desperately need. His program today is a leading range science program, and his contributions will be a standard upon which future advances in aerial monitoring will be based.

