

# **Outstanding Young Range Professional Award Citations**

## **Dr. Jeremy J. James**

---

As a rangeland scientist with the USDA-ARS at the Eastern Oregon Agricultural Research Center in Burns, Oregon, Dr. Jeremy James's research program is redefining our perceptions of arid rangeland ecology. His work has linked plant morphological characters and proficiency of resource capture to create a simple technique for identifying those plants most likely to be competitive with invasive species and these findings are being incorporated into range restoration by the USDA in multiple western states. His research exploring linkages between plant functional group diversity and soil nitrogen levels is currently being used to guide a six-state, multi-agency plan to manage invasive annual grasses on rangelands. Dr. James's ability to unify temporal and spatial variability in environmental conditions with altered physiological status of desired species has resulted in definitions of windows of management opportunity that serve as practical guides for increasing restoration success. His graduate work in the Mojave Desert precipitated changes in irrigation and fertilization practices that save a quarter of a million dollars annually, increase nitrogen use efficiency and reduce nutrient inputs to groundwater.



Occasionally a range professional comes along who forces us to re-examine old ideas and look to the future with new insights and renewed enthusiasm. Dr. James is such a person. He has identified areas of critical deficiency in our understanding of rangeland ecology, positioned himself to make a difference, and is in the process of generating contributions that are already changing our paradigms of rangeland restoration.