

# THE FUTURE OF THE ARID LAND ECOLOGY (ALE) RESERVE

## A Statement by the Ecological Society of America

The Arid Land Ecology (ALE) Reserve, a 120 square mile tract of land within the boundaries of the Hanford Reservation in south-central Washington State, is being considered for transfer from the Department of Energy to another federal agency or the Yakima Indian Nation. The Ecological Society of America (ESA), a professional society of basic and applied ecologists with more than 7,000 members, takes no position with respect to the most appropriate future owner of the ALE Reserve. However, because of the ecological uniqueness and scientific importance of the ALE Reserve, **the Ecological Society of America is concerned that the Reserve be preserved as the only large, ungrazed tract of Columbia Basin Shrub Steppe and that continuing scientific studies not be jeopardized by any transfer of ownership that may be accomplished.**

The ALE Reserve was established in 1967 to preserve cultural resources and arid land plants, animals, and microorganisms and their habitats. Since then the Reserve, the best remaining ungrazed tract of Columbia Basin Shrub Steppe, has served as an undisturbed ecosystem where scientists have investigated a wide variety of environmental questions. ALE, which is part of the Hanford Environmental Research Park (NERP), serves as an outdoor laboratory for teachers and scientists from many institutions. Several hundred faculty and graduate students have participated in courses and research projects at ALE, and more than 80 Master's and Doctoral dissertations have been completed using ALE facilities. More than 350 scientific publications and numerous technical reports have resulted from research carried out at ALE. Much of this research was synthesized in a book entitled "Shrub-Steppe: Balance and Change in Semi-Arid Ecosystems," published in 1988.

The research record accomplished by scientists working at ALE is unparalleled in the United States. Disrupting that long-term research record would deprive scientists and the people of the United States of an irreplaceable ecological knowledge base. Shrub-steppe is a widespread ecosystem type in arid regions of western United States, but most of it has been seriously altered and degraded as a result of human activities. Wise restoration and management decisions for this ecosystem will depend upon the existence of a long-term ecological knowledge base derived from the study of a large tract of undisturbed land because ecological processes and products on small, isolated ecosystems differ sufficiently from processes on large tracts. No other tract that could serve that purpose remains in the Columbia Basin.

**The Ecological Society of America believes that it is vital to protect and maintain the near-pristine ALE Reserve.** If the area continues to be protected, scientists will be able to expand the long-term data base at the ALE Reserve that is of irreplaceable importance to the science of ecology and to the Nation's understanding of the functioning of the shrub-steppe ecosystem type. **Therefore, the Ecological Society of America urges, if the ALE Reserve is transferred to some other ownership, that conditions for the transfer include legally binding commitments to manage the Reserve to maintain its near-pristine, ungrazed nature, and to support the scientific research program at ALE.** To deviate from this course of action would jeopardize the ability of ALE to serve as a baseline for comparisons with more intensively managed areas.