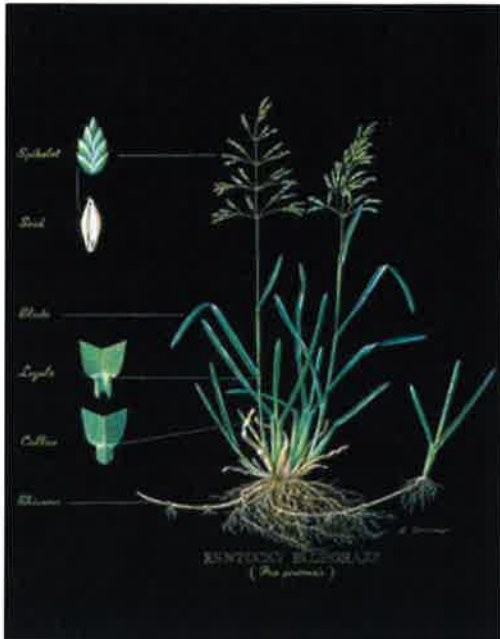


# Extent of Kentucky bluegrass and its effect on native plant species diversity and ecosystem services in the Northern Great Plains of the USA

David Toledo, ARS

Despite the fast introduction and expansion of Kentucky bluegrass, the consequences of its expansion on native plant species diversity and ecosystem services remain largely unknown.



This paper reviews available research related to Kentucky bluegrass and evaluates its effects on native plant diversity and ecosystem services in the Northern Great Plains of the USA.

This review on effects of Kentucky bluegrass on ecosystem services follows the four categories of ecosystem services described in the Millennium Ecosystem Assessment: supporting, provisioning, regulating and cultural ecosystem services.

Based on our review, we found that invasion may bring serious consequences to biodiversity and ecosystem services. Despite the need for change in the way that Kentucky bluegrass invaded areas are managed, the change required (i.e., reintroducing natural disturbance regimes) and the magnitude of change is still uncertain and more research is needed to determine how to control and manage Kentucky bluegrass in native rangeland ecosystems.

Toledo, D., Sanderson, M.A., Spaeth, K., Hendrickson, J.R., Printz, J. 2014. Extent of Kentucky bluegrass and its effect on native plant species diversity and ecosystem services in the Northern Great Plains of the USA. *Invasive Plant Science and Management*. 7:543-552.

<http://www.bioone.org/doi/abs/10.1614/IPSM-D-14-00029.1>