

CURRICULUM VITA

Dr. K. George Beck

Professor: 8 mo Cooperative Extension, 4 mo Agricultural Experiment Station

Date of Appointment: September 26, 1985

EDUCATION

B.S., Animal Science, May 1975, University of Idaho

M.S., Animal Science, July 1977, University of Idaho

Ph.D., Plant Science, June 1985, University of Idaho

AREA OF EXPERTISE

Management of invasive plant species (noxious weeds) in natural resource areas, rangeland, pastures, and non-crop areas.

SELECTED THESES/DISSERTATIONS SUPERVISED

Benz, L.J. 1997. A management system to reclaim Russian knapweed infested rangeland for multiple use. M.S. thesis.

Pedreiros, J.A. 1997. Mechanical control of winter annual weeds in established alfalfa. M.S. thesis.

Kebede, Z. 1997. Jointed goatgrass interactions with winter wheat. Ph.D. dissertation.

May, S. 1999. A survey of noxious weeds. M.S. thesis.

Grant, D. 2000. The influence of Russian knapweed on the germination, growth, and initial survival of four native grasses. M.S. thesis.

Wilson, R.G. 2001. Biology and management of diffuse knapweed. M.S. thesis.

Sutton, J.R. 2003. Prediction and characterization of yellow toadflax (*Linaria vulgaris* Mill.) infestations at two scales in the Flat Tops Wilderness of Colorado. M.S. thesis.

Baker, D.V. 2007. Dispersal of an invasive tumbleweed. Ph.D. dissertation.

Krick, Nicholas 2011. Examining the unpredictable nature of yellow toadflax. M.S. thesis

Currently advise 1 Ph.D. and 1 M.S. students.

COURSES TAUGHT

BSPM308; Ecology and Management of Weeds. Fall 2010 and continue until retirement

W308; Biology and Control of Weeds. Fall, 1989, 1990, and 2001.

EN/PD/W556; Biological Control of Plant Pests. Team taught in fall, 1992; spring, 1994; fall 1995, 1997, 1999.

GRANTS RECEIVED

(2010) Invasive Weed Wright – an extension education program. USDA-NIFA-EIPM. \$16,780.

(2009) Managing downy brome seed production and litter to exhaust its soil seed reserve. Boulder County Parks and Open Space Small Grants Program; \$4984.

(2004) Management strategies for establishing cool or warm season grasses on downy brome infested rangeland. \$4,965. Boulder County Mountain Parks and Open Space Small Grants Program 2004. Co-PI Dr. Scott Nissen.

(1999) The influence of cattle grazing on the population dynamics of diffuse knapweed; co-PI Larry Rittenhouse; City of Boulder Open Space Department; \$13,979.

(1998) The influence of cattle grazing on the population dynamics of diffuse knapweed; co-PI Larry Rittenhouse; City of Boulder Open Space Department; \$14,294.

(1998) The interaction of picloram, clopyralid, and *Sphenoptera jugoslavica* on diffuse knapweed population dynamics, coPI Philip Westra; submitted to DowAgro Sciences and USDA-Forest Service; \$31,000.

(1997) The influence of cattle grazing on the population dynamics of diffuse knapweed; co-PI Larry Rittenhouse; City of Boulder Open Space Department; \$15,803.

(1997) Noxious weed distribution in the United States; co-PI John Mitchell; submitted to USDA-Forest Service; \$18,000
(1996) The influence of cattle grazing on the population dynamics of diffuse knapweed; co-PI Larry Rittenhouse; City of Boulder Open Space Department; \$15,682.
(1996-1998) Invasion of rangeland by aggressive perennial weeds: Ecology and management; coPI Debra Peters-Coffin; USDA-CSREES-NRICGP Forest/Range/Crop/Aquatic Ecosystems Program; \$387,000.
(1991-1999) Integrated leafy spurge management: Combining biological control tools to reduce or eliminate herbicide use; co-PIs L.R. Rittenhouse, P.C. Quimby, and N.R. Rees; submitted to USDI-BLM; \$130,400.
(1990-1992) Leafy spurge management with sheep grazing combined with fall herbicide applications; submitted to DowAgro Sciences; \$14,000.
(1990-1992) Combining mowing and fall herbicide applications for Canada thistle management in pastures non-crop areas; submitted to DowAgro Sciences; \$13,500.
(1987-1989) Ecological constraints to revegetating Russian knapweed infested rangeland; submitted to USDA-CSRS Rangeland Grants Program; \$31,080

PROFESSIONAL AFFILIATIONS

Memberships in professional societies:

Weed Science Society of America
Western Society of Weed Science
Society for Range Management
International Weed Science Society
American Association for the Advancement of Science
Colorado Weed Management Association

Committees related to invasive species issues:

(2002 through 2008) Invasive Species Advisory Committee to the National Invasive Species Council; chair 2007-2008.
(2003-2007) Colorado Noxious Weed Law Advisory Committee to the Colorado Dept. of Agriculture.
(2002 through present) Weld County Noxious Weed Advisory Board.
(2001 through present) Weed Parameters Advisory Board Colorado Dept. of Agriculture.
(1999-2000) Advisory Board and Steering Committee Western Governor's Association Invasive Species Initiative.
(1995 through present) Colorado Noxious Weed Management Team.
(1995 through present) Advisory Board Colorado Department of Agriculture Weed-free Hay, Forage, and Mulch Program.
(1986-1997) Larimer County Noxious Weed Advisory Board.

HONORS AND AWARDS

1994, Innovation Award, Colorado Weed Management Association
2000, Outstanding Weed Scientist – Public Sector, Western Society of Weed Science
2000, Lifetime Achievement Award, Colorado Weed Management Association
2001, Lifetime Achievement Award, North American Weed Management Association
2006, Special Achievement Award; National Invasive Weed Awareness Week; Invasive Weed Awareness Coalition, Washington D.C.
2008, Fellow, Western Society of Weed Science

PUBLICATIONS PAST FIVE YEARS

Refereed journals:

Goslee, Sarah, Debra Peters, and George Beck. 2006. Spatial prediction of invasion success across heterogeneous landscapes using an individual-based model. *Biol. Invasions* 8:193-200.

Sutton, Jason R., K. George Beck, Thomas J. Stohlgren, and Phillip L. Chapman. 2007. Yellow toadflax infestations in the Flat Tops Wilderness of Colorado. *Biol. Invasions* 9(7):783-793

Enloe, Stephen F., Rodney G. Lym, Robert Wilson, Phil Westra, Scott Nissen, George Beck, Michael Moechnig, Vanelle Peterson, Robert A. Masters, and Mary Halstvedt. 2007. Canada thistle (*Cirsium arvense*) control with aminopyralid in range, pasture and noncrop areas. *Weed Technology* 21:890-894.

Baker, D.V., B.J. Bienkiewicz, K.G. Beck, and L.B. Bjostad. 2008. Forces necessary to initiate dispersal for three tumbleweeds. *Invasive Plant Science and Management* 1(1):59-65.

Ward, Sarah M., Scott D. Reid, Judy Harrington, Jason Sutton, and K. George Beck. 2008. Genetic variation in populations of yellow toadflax (*Linaria vulgaris*) in the western United States. *Weed Sci.* 56:394-399.

Ward, Sarah M., Scott D. Reid, Judy Harrington, Jason Sutton, and K. George Beck. 2008. Genetic variation in populations of yellow toadflax (*Linaria vulgaris*) in the western United States. *Weed Sci.* 56:394-399.

Baker, Dirk V. and K. George Beck. 2008. The weed tunnel: Building an experimental wind tunnel. *Weed Technol.* 22:549-552.

Beck, K. George, Kenneth Zimmerman, Jeffrey D. Schardt, Jeffrey Stone, Ronald R. Lukens, Sarah Reichard, John Randall, Allegra A. Cangelosi, Diane Cooper, and John Peter Thompson. 2008. Invasive species defined in a policy context: Recommendations from the federal Invasive Species Advisory Committee. *Invasive Plant Science and Management* 1(4):414-421.

Baker, D.V., J.R. Withrow, C.S. Brown, and K.G. Beck. 2010. Tumbling: Use of diffuse knapweed (*Centaurea diffusa*) to examine an understudied dispersal mechanism. *Invasive Plant Science and Management* 3:301-309.

Non-refereed technical publications:

Baker, Dirk V. and K. George Beck. 2006. Developing a spatially explicit model for the local dispersal of diffuse knapweed: A project overview. *Proc. Weed Sci. Soc. Am.* 46:17.

Baker, Dirk V. and K. George Beck. 2005. Effects of moisture on dispersal of three tumbleweeds: Implications for Drought? *Proc. Wes. Soc. Weed Sci.* 58:56.

Baker, Dirk V. and K. George Beck. 2007. Differences between sites in the tumbling dispersal of diffuse knapweed may be attributable to biotic causes. *Proc. Weed Sci. Soc. Am.* .

Baker, Dirk V., Jeff A. Tracey, John R. Withrow, and K. George Beck. 2007. Tumbling dispersal of diffuse knapweed seed. *Proc. Wes. Soc. Weed Sci.* 60:38.

Sebastian, James R. and K.G. Beck. 2008. Broadleaf herbicide effects on native forbs, shrubs, and grasses. *Proc. Wes. Soc. Weed Sci.* 61:25-26.

Cummings, D.C., Mary B. Halstvedt, Stephen F. Enloe, and K. George Beck. 2009. Houndstongue control with aminopyralid. *Proc. Wes. Soc. Weed Sci.* 62:39-40.

Edwards, Ryan J., James Sebastian, and George Beck. 2009. Variability of Russian olive control using herbicides. *Proc. Wes. Soc. Weed Sci.* 62:9.

Sebastian, James and K.G. Beck. 2009. Effective herbicides for controlling yellow toadflax. *Proc. Wes. Soc. Weed Sci.* 62:8-9.

Krick, Nicholas and K.G. Beck. 2010. Geographically segregated yellow toadflax populations and their response to chlorsulfuron and imazapyr. *Proc. Weed Sci. Soc. Am./Soc. Range Management.*
<https://srm.conference-services.net/reports/template/onetextabstract.xml?xsl=template/onetextabstract.xsl&conferenceID=1756&abstractID=344893>