GILES CASSIDY THELEN NATIVE YARDS, INC 1023 ELM ST

MISSOULA, MT 59802

TELEPHONE: (406) 543-2532 GILES@NATIVEYARDS.COM

EDUCATION:

1996-1999 The University of Montana MS, Organismal Biology and Ecology Thesis title: Heterozygosity and Fitness in Rainbow Trout: Marker Loci or Chromosomal Segments?

1989-1994 University of Oregon

Bachelor of Science, Biology

PUBLICATIONS:

- He W-M, D. Montesinos, G.C. Thelen, and R.M. Callaway. 2012. Growth and competitive effects of *Centaurea stoebe* populations in response to simulated nitrogen deposition. PLoS ONE 7(4): e36257.
- Callaway, R.M., U. Schaffner, G.C. Thelen, A. Khamraev, T. Juginisov and J.L. Maron. 2011. Impact of *Acroptilon repens* on co-occurring native plants is greater in the invader's nonnative range. *Biological Invasions*.
- Besaw, L. M., G. C. Thelen, S. Sutherland, K. Metlen, and R. M. Callaway. 2011.

 Disturbance, resource pulses and invasion: short-term shifts in competitive effects, not growth responses, favour exotic annuals. Journal of Applied Ecology: 48:998–1006...
- He, W., G. C. Thelen, W. M. Ridenour, and R. M. Callaway. 2010. Is there a risk to living large? Large size correlates with reduced growth when stressed for knapweed populations Biological Invasions 12:3591–3598.
- Thelen, G.C. and K.J. Dixon. 2009. Native Sod Rescue A Viable Business Model (Montana). Ecological Restoration 27:127-129.
- Pollock, J.L., R.M. Callaway, G.C. Thelen and W.E. Holben. 2009. Catechin—metal interactions as a mechanism for conditional allelopathy by the invasive plant, *Centaurea maculosa*. Journal of Ecology 97:1234-1242.
- Thorpe, A.S., G.C. Thelen, A. Diaconu and R.M. Callaway. 2009. Root exudate is allelopathic in invaded community but not in native community: field evidence for the novel weapons hypothesis. Journal of Ecology 97:641-645.
- He, W., Feng, Y., Ridenour, W.M, Thelen, G.C., Pollock, J.L., Diaconu, A. and Callaway, R.M. 2009. Novel weapons and invasion: biogeographic differences in the competitive effects of *Centaurea maculosa* and its root exudate (±)-catechin. Oecologia 159:103-115.
- Callaway, R.M., D. Cipollini, K. Barto, G.C. Thelen, S.G. Hallett, D. Prati, K. Stinson, and J.Klironomos. 2008. Novel weapons: invasive plant suppresses fungal mutualists in America but not in its native Europe. Ecology 89:1043-1055.
- Perry, L.G. G.C. Thelen, W.M. Ridenour, R.M. Callaway, M.W. Paschke, and J.M. Vivanco. 2007. Concentrations of the Allelochemical (±)-Catechin in *Centaurea maculosa* Soils. Journal of Chemical Ecology 33:2337-2344.
- Stinson, K.A., S.A. Campbell, J.R. Powell, B.E. Wolfe, R.M. Callaway, G.C. Thelen, S.G. Hallett, D. Prati and J.N. Klironomos. 2006. Invasive plant suppresses the growth of native tree seedlings by disrupting belowground mutualisms. Public Library of Science 4:727-731. (Listed by Discovery Magazine as one of 2006's most important discoveries).
- Weir, T.L., H.P. Bais, V.J. Stull, R.M. Callaway, G.C. Thelen, W.M. Ridenour, S. Bhamidi, F.R. Stermitz and J.M. Vivanco. 2006. *Oxalate contributes to the resistance of Gaillardia grandiflora* and *Lupinus sericeus* to a phytotoxin produced by *Centaurea maculosa*. Planta 223:785-795.

- Perry, L.G. G.C. Thelen, W.M. Ridenour, T.L. Weir, R.M. Callaway, M.W. Paschke, and J.M. Vivanco. 2005. Dual role for an allelochemical: (±)-catechin from *Centaurea maculosa* root exudates regulates conspecific seedling establishment. Journal of Ecology 93:1126-1135.
- Thelen, G.C., J.M. Vivanco, B. Newingham, W.Good, H.P. Bais, P. Landres, A. Caesar, and R.M. Callaway. 2005. Insect herbivory stimulates allelopathic exudation by an invasive plant and the suppression of natives. Ecology Letters 8:209-217.
- Callaway, R. M., G. C. Thelen, S. Barth, P.W. Ramsey, and J.E. Gannon. 2004. Soil fungi alter interactions between the invader *Centaurea maculosa* and North American natives. Ecology 85(4):1062-1071.
- Vivanco, J., H. Bias, F. Stermitz, G. Thelen, R. Callaway. 2004. Biogeographical variation in community response to root allelochemistry: novel weapons and exotic invasion. Ecology Letters 7: 285-292.
- Callaway, R. M., G. C. Thelen, A. Rodriguez, and W.E. Holben. 2004. Soil biota and exotic plant invasions. Nature 427:731-733.
- Thelen, G. C. and F. W. Allendorf. 2001. Heterozygosity-Fitness correlations in rainbow trout: effects of allozyme loci or associative overdominance? Evolution 55(6):1180-1187.

PHOTO CREDITS:

- 2009. Ecological Restoration Journal **27**:128.
- 2006. The University of Montana's Vision 2006: page26-29.
- 2004. The University of Montana's Research View **6**(4): page 1.
- 2004. Frontiers in Ecology and Environment 2(8): page 440.
- 2004. Smithsonian December 2004: page 33.

PUBLIC RELATIONS:

"Interview with an expert" on the "Pulse of Western Montana" public affairs program from the Missoula radio group, Fall 2005.

PROFESSIONAL PRESENTATIONS:

- Promoting natives: combining current research with management. Invasive species in Natural Areas conference. Coeur d'Alene, ID Oct 25th, 2010
- Community Ecology and Invasions. Moderator Invasive Species in Natural Areas conference. Missoula, MT March 2008
- Plant Issues in the Missoula Valley. The National Exchange Club. Missoula, MT December 4th, 2008.
- Insect herbivory stimulates allelopathic exudation by an invasive and the suppression of natives. Ecology Society of America, 89th annual meeting. Portland, Oregon. 2-6 August,
- 2004 *The Black Sea Region: Birthplace of Western US Exotic Plants*. Caspian Region Interest Group, The Mike and Maureen Mansfield International Center, Missoula, MT. May 4th, 2004.
- Centaurea invasion: the effects of allelopathy, herbivory, and evolution. Invited speaker (Dr. Chris Lortie, host). University of Nevada, Reno. April 1st, 2004.
- Centaurea invasion: the effects of allelopathy, herbivory, and evolution. **Invited speaker** (Dr. John McKay, host). University of California, Davis. March 29th, 2004.
- Heterozygosity-Fitness correlations in rainbow trout: effects of allozyme loci or associative overdominance? Society for Conservation Biology, 14th Annual Meeting. University of Montana, Missoula, MT. 10-12 June 2000.
- Heterozygosity-Fitness correlations in rainbow trout: effects of allozyme loci or associative

verdominance? Coastwide Salmonid Genetics Meeting. University of Montana, Missoula, Montana 2-4 June, 1999.

Heterozygosity-Fitness correlations in rainbow trout: effects of allozyme loci or associative overdominance? Organismal Biology and Ecology seminar series January 27th 1999.

Genetics: an overview of allozyme and microsatellite techniques. The UM Wild Trout and Salmon Genetics Lab and the MT Fish, Wildlife, and Parks information meeting. February 24-25, 1999.

PROFESSIONAL EXPERIENCE

2005-present

Native Yards, Inc Missoula, MT

- Founded and developed business working towards five goals: 1) promote native plants in the inland Northwest through native plant landscaping and design, 2) Wildland management and restoration, 3) native plant propagation, 4) native sod rescuing and storage 5) research for cutting edge plant management tools
- Business has increased it's revenue every year since inception
- 48 employees on payroll in 2010

2009 – present International Editorial Board

Journal of Plant Development ISSN 2065-3158 Based in Iasi, Romania.

RESEARCH EXPERIENCE:

2000-2011 The University of Montana Missoula, MT

Research Specialist Supervisor: Dr. Ragan Callaway

- Determining why invasive plants, specifically Centaurea spp., are so virulent. Also work on many other research topics related to plant ecology, mainly plant-plant and plant-soil interactions
- Plan, coordinate, conduct, and complete extensive field, greenhouse, and genetic experiments
- Write grants, peer reviewed papers, data analysis and organization, supervising up to eight employees, working in collaboration with many other scientists
- Manage grant money and general lab managerial duties

1999-2000 US Geological Survey –Biological Resources Division, Glacier National Park **Lead Field Biologist** Supervisor: Dr. Steve Corn

- Field aspect trying to determine effects of ultraviolet radiation on amphibians in the Park
- Determine presence or absence of species, collect extensive physical and water measurements
- Extensive use of map and compass, as well as GPS units

Summer 1998 The University of Montana Missoula, MT

Research Technician

Supervisor: Dr. Anna Sala

- Assisted in a research project on controlled burns in two old-growth pine and larch stands
- Set-up sap flow conductors and data loggers, took soil moisture measurements and tree cores, quantified
- vegetation plots, and data analysis

1996-1999 The University of Montana Missoula, MT

Genetic Analysis of Fishes

Supervisors: Dr. Fred Allendorf & Dr.Robb Leary

- Applied conservation and population genetic issues on several trout species using both protein electrophoresis and polymerase chain reaction based molecular genetic methods
- Analyze results, and write summary reports for distribution
- Very comfortable using PC and MAC computers, including several statistical programs
- Teaching Assistant for Genetics and Evolution for three semesters, and general biology for one semester

1994-1996 Oregon Department of Fish and Wildlife Springfield, OR **Lead Seasonal Bull Trout Biologist** Supervisor: Jeff Ziller

- extensive day and night snorkeling throughout two drainages
- electrofishing, both backpack and boat based
- spawning surveys for bull trout and other salmonid species
- radio telemetry and several different trapping methods
- creel surveys and report writing

1993-1995 Oregon Department of Fish and Wildlife Springfield, OR Seasonal Biologist Supervisor: Jeff Ziller

- mark/recapture on migrating chinook salmon fry
- steelhead trapping and tagging
- bull trout duties as listed above

HONORS, AWARDS, AND ACHIEVEMENTS:

- Triathlon Director for the Grizzly Triathlon 1999-CURRENT
 - o largest indoor triathlon in USA (475 racers)
 - o Oversee a budget of ~\$40,000
- Judge for district and regional science fairs, Spring 1997 2010
- Member of the Montana Native Plant Society since 2001
- Member of the Mount Jumbo Advisory Committee since 2002 (chair beginning 2004-CURRENT)
- Conservation Lands Technical Working Group Invited position. One of seven 'technical experts' for Conservation Lands in Missoula
- Runner-up for best student speaker, Coastwide Salmonid Genetics Meeting Missoula, MT 2-4th June, 1999
- Runner-up for Division of Biological Sciences outstanding teaching assistant award, The University of Montana May, 1997

PERSONAL INFORMATION:

Born September 24th, 1971 Portland, Oregon