

News from the



Winter 2013

The Wildlife Society Honors WEST Biologist

WEST biologist, Hall Sawyer, received the award for Professional of the Year for 2012, presented by the Wyoming Chapter of The Wildlife Society.

This award is presented in recognition of exemplary dedication to the profession of managing Wyoming's wildlife resources.

As a biologist in the private sector, Hall has created a unique niche: leading ungulate research that educates and informs wildlife management and conservation professionals in Wyoming and beyond. Any one of his significant intellectual contributions to the field would be worthy of a career – from leading the longest running energy development study on mule deer to redefining ungulate migration ecology.

His colleagues know Hall to be easy to work with, congenial, and a lot of fun. He works hard to be inclusive and to share credit and experience with students and co-workers. He rarely declines a request for data and welcomes collaborations. Above all, Hall is humble, almost to a fault. He is so willing to share the credit that we sometimes forget it is Hall who is quietly leading the way.

Congratulations, Hall!!



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WEST Biologists Study New Wildlife Overpasses

In the fall of 2012, the Wyoming Department of Transportation (WYDOT) completed construction of the first wildlife overpasses in Wyoming. The project is located along US 191, west of Pinedale, where thousands of mule deer and pronghorn cross US 191 during their migrations to and from seasonal ranges.

As traffic levels have increased in recent years, so have the number of wildlife-vehicle collisions. An average of greater than 100 pronghorn and mule deer are killed each year along the 12-mile section of road. In an effort to reduce wildlife-vehicle collisions, WYDOT installed 6 underpasses, 2 overpasses, and 12 miles of game-proof fencing at a cost of \$9.7 million.



WEST was contracted to evaluate the effectiveness of those structures and determine the number and timing of animals using them. To do this, WEST biologists **Hall Sawyer** and **Chad LeBeau** set up motion-sensor cameras on each of the crossing structures to monitor the pronghorn and mule deer movements. During the fall of 2012, more than 5,000 mule deer and pronghorn utilized the crossing structures.

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WEST Office Locations

Corporate Headquarters

415 West 17th Street
Suite 200
Cheyenne, Wyoming
82001
307.634.1756

Laramie Branch Office

200 South 2nd Street
Suite B
Laramie, Wyoming
82070
Trent McDonald

NE/Mid-Atlantic Region

Waterbury Branch Office
P.O. Box 60
Waterbury, Vermont
05676
David Tidhar

Midwest-East Region

Bloomington Branch Office
408 West Sixth Street
Bloomington, Indiana
47404
Rhett Good

Midwest-West Region

Bismarck Branch Office
4007 State Street
Suite 109
Bismarck, North Dakota
58503
Clayton Derby

Pacific Northwest Region

Walla Walla Branch Office
38 E. Main Street
Suite 211
Walla Walla, Washington
99362

Biologists Study New Wildlife Overpasses (continued)

In general, the underpasses were heavily used by mule deer, whereas pronghorn preferred the overpasses. WEST has been contracted to continue this monitoring for the next four years.

The overpasses have been featured by both National Geographic and Patagonia, highlighting their success at reducing wildlife-vehicle collisions and improving highway safety, while maintaining habitat connectivity for some of the largest migrating mule deer and pronghorn herds in the West. You can view both of those articles at the following links.



<http://news.nationalgeographic.com/news/2012/12/pictures/121204-pronghorn-migration-new-highway-overpass/>

<http://www.thecleanestline.com/2012/12/bridges-for-wildlife-migrating-pronghorn-encounter-a-new-overpass-and-the-freedom-to-roam.html>

WEST CEO, Keynote Speaker at International Windpower Conference

Dr. Dale Strickland, WEST CEO, was a keynote speaker at the "Conference on Wind Power and Environmental Impacts (CWE2013)" in Stockholm, Sweden, February 5-7, 2013. This conference invited experts and stakeholders to share experiences regarding the current and future challenges of wind power.

Dale presented, "A Guide to the Study of the Impacts of Wind Power on Wildlife." The objectives of the study of wind/wildlife interactions are to provide sound scientific information necessary to site and design wind energy facilities to minimize impacts to wildlife and to support the design and evaluation of measures to mitigate unavoidable impacts. To meet these objectives the National Wind Coordinating Collaborative (NWCC; <http://www.nationalwind.org>) published the Comprehensive Guide to Studying Wind Energy/Wildlife Interactions in 2011 (Strickland et al. 2011). Dr. Strickland summarized the methods, metrics, and risk assessment processes presented in this document using case studies as well as discussing potential applications internationally.

Additional information about the CWE 2013 Conference is available at:

<http://www.naturvardsverket.se/SamarbetswebbplatserSv/Vindval/>

More information on Dr. Strickland's key note presentation is available at:

<http://www.naturvardsverket.se/SamarbetswebbplatserSv/Vindval/Keynote-presentation-dale-strickland/>



Blue Mountains Elk Habitat Monitoring Workshop

Ryan Nielson will be co-presenting at the second and final workshop describing Blue Mountains Elk Models. An inter-agency team of scientists, led by the Starkey Ungulate Ecology Team of the U.S. Forest Service, PNW Research Station, developed the models for management application by elk population and land managers across elk summer range in northeastern Oregon and southeastern Washington. For more information on this free, 2-day workshop, please visit: <http://oregonstate.edu/conferences/event/elkhabitat2013/index.html>

Social Media News

WEST has been busy on our LinkedIn page, have you seen our updates? This is a great place to find out where our staff has been, what events we have been involved in, and news updates from WEST. You can access our company page by clicking the icon



Welcome to the WEST Team...

Andrea Eatmon, Administrative Assistant, Cheyenne, WY Office

AJ joined WEST in August 2011 and became a full-time staff member in December 2012, as an Administrative Assistant in the Cheyenne office. She serves as the primary phone operator, coordinates daily office communications, shipping and mailing services, and provides support to other administrative positions.

April Moulart, Biologist, Waterbury, VT Office

April received her B.S. in Natural Resources from Cornell University and her M.S. in Soil Science from North Carolina State University. April has extensive wetlands experience, which includes wetland delineation, wetland functional assessment preparation, wetland permitting, and wetland restoration and mitigation planning.

April began her ecological career by working on studies of nutrient dynamics in forested ecosystems in New Hampshire, Puerto Rico, and Costa Rica. April began doing wetlands-related work in 1995 and worked as an environmental consultant for several years in North Carolina and New York. Following this experience, April then moved to Vermont where she was employed as a Wetland Scientist for the State of Vermont. April conducted both regulatory and planning work for the State. April founded the Wetland Restoration and Protection Program, and oversaw the creation and development of the Lake Champlain Wetland Restoration Plan. After leaving her position with the State, April worked for both private and non-profit organizations doing wetland restoration and mitigation planning, as well as wetland delineation, assessment, and permitting work.

Paul Rabie, Statistician, Cheyenne, WY Office

Paul received his B.A. in Writing from Hampshire College before choosing to pursue a career in the environmental sciences. He completed his post-baccalaureate studies in Natural Resources and received his M.S. in Ecology from the University of Minnesota. Paul acquired his Ph.D. in Botany with a minor in Applied Statistics from Washington State University. He worked with the US Geological Survey scientists for two years prior to joining WEST.

Paul has extensive research experience with invasive plant species, including population demography, community and ecosystem level impacts, chemical and biological control, and community restoration. More recently, Paul has worked on projects investigating the roles of rare and invasive plant species on plant-pollinator networks, on wildlife fatality estimators, and on sampling design for resource inventories.

Steven Ranney, Data Manager, Laramie, WY Office

Steven received his M.S. degree in Fisheries Sciences from South Dakota State University and his B.S. in Biology from Kennesaw State University in Kennesaw, GA. After finishing his M.S. degree, Steven moved to Bozeman, Montana where he worked as a research assistant in the Department of Ecology at Montana State University. His focus was endangered species and mountain fisheries issues in Montana.

Steven is originally from Georgia, but has most recently worked at his own firm in Montana that specialized in assisting landowners with fisheries and terrestrial habitat improvement for their properties, NEPA and MEPA document preparation and compliance, and permitting assistance. He has over six years of experience programming statistical analyses with the programming language R, four years of experience conducting spatial analyses and creating cartographic products with ArcGIS, and can conduct a broad array of statistical analyses (e.g., linear/non-linear regression, parameter estimation, parametric/non-parametric analyses, ANOVA/MANOVA, AIC, etc.). Steve is working in our Laramie office, primarily as a statistician and data manager. In addition, he will also expand our capabilities to perform fisheries-related work.

You can view personnel profiles for our entire staff on our website at:
<http://www.west-inc.com/personnel.html>.



WEST Opens New Pacific Northwest Office

We are proud to announce the opening of another WEST office in the Pacific Northwest!

WEST Biologist Joel Thompson has moved from our Corporate Headquarters in Cheyenne to open this new branch office. The office will be located in the Portland, Oregon area.

We are very excited about this new location as we continue to expand our services in the region. If you have any questions, you can reach Joel at jthompson@west-inc.com



Recent Publications

Sawyer, H., C. LeBeau, and T. Hart. 2012. Mitigating roadway impacts to migratory ungulates – a case study with underpasses and continuous fencing. *Wildlife Society Bulletin* 36:492-498

Nielson, R., D. Thomas, and **L. McDonald.** 2012. Resource selection. In A.-H. El-Shaarawi and W. Piegorisch, editors. *Encyclopedia of Environmetrics*. 2nd ed. John Wiley & Sons, Ltd, Chichester, England. Pages 2223-2228.

Sawyer, H., M. J. Kauffman, Middleton, A. D., Morrison, T. A., **Nielson, R. M.,** and T. B. Wyckoff. 2012. A framework for understanding semi-permeable barrier effects on migratory ungulates. *Journal of Applied Ecology*.

Rivera- Parra, J.L., **K.M. Levenstein,** J.C. Bednarz, F.H. Vargas, V. Carrion, and P.G. Parker. 2012. Implications of Goat Eradication on the Survivorship of the Galapagos Hawk. *Journal of Wildlife Management* 76(6): 1197-1204; doi: 1110/1002/jwmg.1372

Nielson, R.M., L. McManus, T. Rintz, and **L.L. McDonald.** 2012. A Survey of Golden Eagles (*Aquila chrysaetos*) in the Western US, 2006 - 2012. Prepared for the US Fish and Wildlife Service (USFWS), Migratory Birds, Albuquerque, New Mexico. Prepared by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. December 14, 2012.

Huso, M. and **W Erickson.** 2013. A Comment on "Novel Scavenger Removal Trials Increase Wind Turbine-Caused Avian Fatality Estimates". *J. Wild. Man.* Vol 77. Issue 2.

Busy TWS 2012 Conference for WEST Biometrician

Ryan Nielson presented a workshop, "Spatial Statistics in R" at The Wildlife Society Annual Conference. This workshop's focus was to familiarize participants with current techniques in the analyses of spatial data and show how the R Statistical Computing Environment can be used as a flexible and powerful tool for modeling spatially referenced data.

During the conference, Ryan was selected **Chair-Elect of the Biometrics Working Group (BWG) of The Wildlife Society.** The BWG has about 200 members and promotes the development and application of biometrical methods in the study and management of wildlife resources. The BWG sponsors workshops, symposia, and student travel grants for the annual TWS meetings.

Where We've Been

Dale Strickland, Wally Erickson, Lindsay McManus, Jeff Gruver, Ryan Nielson, and Hall Sawyer attended **The Wildlife Society 19th Annual Conference**, in Portland, Oregon, October 13-18, 2012. While there, Wally presented "Golden Eagle Risk and Fatality Modeling", Hall presented "Stopover Ecology of Migratory Ungulates", Ryan presented "Monitoring Golden Eagle Abundance in the Western United States" and Lindsay presented a poster "Elk Response to Construction of Pedestrian Pathway."

WEST was well-represented by 18 of our staff members at the **National Wind Coordinating Collaborative Research Meeting** in Denver, Colorado, November 27-30, 2012. Wally Erickson, Kim Bay, Clayton Derby, Shay Howlin, Greg Johnson, Chad LeBeau, Cara Meinke, Chris Nations, Donald Solick, Michelle Sonnenberg, Kenton Taylor, Joel Thompson, and David Tidhar all gave presentations or had posters on display representing a wide variety of topics and information.

Wally Erickson presented at the **AWEA Southwest Regional Summit** in Houston, Texas, December 5 - 6, 2012. He presented "Approaches to Reduce "Costs" and Maintain Good Science in Monitoring and Understanding Wildlife Impacts at Wind Projects."

Staff members Rhett Good, Kevin Murray, and Jason Ritzert from our Bloomington, Indiana office attended the **Ohio Oil and Gas Oilfield Expo** in Cleveland, Ohio, December 4-6 2012

Jeff Gruver attended the **Northeast Bat Working Group Meeting** in Albany, New York, January 9-11, 2013. While attending the meeting, Jeff was elected Secretary of the Board of the NBWG.

Wally Erickson, Dave Young, and Joel Thompson attended the **AWEA Wind Project Siting Seminar** in Portland, Oregon on Feb. 19-20. While there, Wally Erickson presented "Approaches to Reduce "Costs" and Maintain Good Science in Monitoring and Understanding Wildlife Impacts at Wind Projects."