News from the WE

Summer 2012

Website Feature: Reports and Publications

Have you had a chance to check out the reports and publications page on the WEST website?

Our experienced statisticians, biometricians, biologists, and other staff members publish numerous reports and publications throughout the year and many of these are posted on our website.

Our reports and publications are grouped based on subject matter; featuring Big Game Research and Monitoring, Statistics and Biometrics, Wind Power Projects, Wildlife Surveys, as well as Resource Selections Conference Proceedings. These are listed by author name, followed by publication title.

The reports and publications show an icon when a .pdf is available for download.
Once clicked, your download will automatically begin.

The page can be found at: http://www.west-inc.com/
reports.html. We update this page often as new reports come available.

If you have any questions about reports/publications from WEST, please contact marketing@west-inc.com.



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Wind Energy Guidelines Implementation

The U.S. Fish and Wildlife Service (USFWS) has recently released the USFWS Land-based Wind Energy Guidelines, that help wind energy developers avoid and minimize impacts of land-based wind projects on wildlife and habitats. These new guidelines provide "a structured, scientific process for addressing wildlife conservation concerns at all stages of land-based wind energy development."

The final guidelines can be viewed at: http://www.fws.gov/windenergy/docs/WEG_final.pdf

WEST is uniquely qualified to help its clients navigate the requirements of these guidelines, as well as the State Guidelines. In addition, we can also assist with Eagle Conservation Plan Guidance.



Our unique understanding comes from many years of wind energy project experience, with which we have compiled a database of over 150 wind energy/wildlife studies. WEST was an advisor on the Federal Advisory Committee that provided recommendations that served as the foundation for the USFWS Guidelines. WEST was the lead author of the Methods and Metrics Document, "Comprehensive Guide to Studying Wind Energy/Wildlife Interactions." WEST has implemented hundreds of studies at sites across the U.S. that address each Tier of the Guidelines and developed risk-based approaches and tools for advising clients on the data and studies necessary to follow the guidelines. WEST designs monitoring protocols that satisfy client- and project-specific needs without prohibitive expense. In particular, our use of state of the art sampling plans results in a cost-effective post-construction monitoring.

Wind Energy Guidelines Implementation Tool

Through its extensive experience and expertise, WEST has gained a complete understanding of the Guidelines, and how best to implement them. WEST has developed a unique step-wise implementation tool to navigate the Guidelines. This tool assists our clients in their decision-making process, customizing cost-effective approaches to accomplish the Guideline objectives. WEST's Implementation plan is linked to our comprehensive database of over 150 publicly available preand post-construction wind energy/wildlife studies and other publicly available data to facilitate a risk-based approach to addressing the questions posed by the Guidelines. The implementation tool can be utilized at any Tier and a start here can aid project development

(Continued on Pg.2)

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Wind Energy Guidelines Implementation (continued)

to avoid significant impacts to wildlife from start to finish. Our process begins with problem formulation and ultimately results in a complete Bird and Bat Conservation Strategy (BBCS) that succinctly documents implementation of the WEG.

Our implementation tool can aid the industry in assessing what information is known, what information is needed, and how this information can be obtained most efficiently. WEST Project Managers utilize this tool to determine whether existing data sufficiently addresses questions in the Wind Energy Guidelines or if additional studies are needed. Through this assessment,



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gaps in knowledge are identified, enabling the development of targeted studies to address those gaps. The resulting studies include surveys targeted at obtaining information to answer only questions that cannot be addressed with the current state of science. Our plan's risk-based approach transforms the way wind energy/wildlife studies are developed by tailoring ecologically relevant study protocols specific to each project.

Bird and Bat Conservation Strategy

WEST can develop a project-specific Bird and Bat Conservation Strategy (BBCS) through the use of this implementation tool or independent of it. The BBCS documents the analyses, studies, and reasoning developers have used in the implementation of the Wind Energy Guidelines. A project-specific BBCS can be developed as each Tier is addressed, or the BBCS can be used to organize and document compliance measures already taken. A BBCS created by WEST includes links to each report, resource, or reference that illustrates the rationale behind every decision made in the process of project development. WEST, in concert with the developer, is able to prepare a BBCS that addresses the unique circumstances for wind projects through all stages of development.

For more information about our Wind Energy Services, please visit our website at: www.west-inc.com/windenergyservices.html or contact us at marketing@west-inc.com.

WEST Staff Aid in Search for Rare Bat Species

WEST staff members from our Bloomington, Indiana office helped coordinate and conduct studies to determine the presence of Indiana bats at the Beanblossom Bottoms Nature Preserve, just outside of Bloomington.

Kevin Murray coordinated this effort between WEST, the Sycamore Land Trust, and the U.S. Fish and Wildlife Service. Kevin and Matt Clement were responsible for placing AnaBat $^{\text{TM}}$ detectors on the preserve and analyzing the calls to help determine the ideal locations to set up mist-netting efforts.

Matt and Jason Ritzert participated in the four nights of netting that were conducted. These studies yielded three Indiana bat captures. They also provided documentation of summer roosts on the preserve by tracking the captured Indiana bats and conducting emergence counts.



A news article was recently published at Indystar.com that discussed the unique findings of this research. The article can be found at:

http://blogs.indystar.com/starwatch/2012/07/11/rare-bat-found-at-monroe-county-nature-preserve/



Check it out: WEST Job Board

You can access our current available job postings on our website. This board is updated frequently and contains all current job postings, their requirements and job details. This board contains postings for all positions at all of our offices.

If you are looking to join the WEST team, refer to the Job Board often. You can also send job postings to others directly from the page. The job board can be found at: http://westinc.catsone.com/careers/index.php?m=portal.

Visit us on Social Media

Click on any of the icons below to be connected to those WEST sites.









8th Annual U.S. Fish and Wildlife Service Golden Eagle Survey

WEST will be conducting the 8th annual golden eagle survey between 15 August and 15 September 2012. This project for the U.S. Fish and Wildlife Service involves flying small, fixed-wing aircraft across four Bird Conservation Regions in twelve states, over 17,000 km of transects in the western U.S. using two crews of experienced observers and a mark-recapture modification to standard distance sampling survey protocol.





This is the eighth year the U.S. Fish and Wildlife Service has contracted with WEST to conduct the survey and estimate the total number of golden eagles living in the western U.S.

You can access the report from the 2011 survey, as well as other past surveys at: http://west-inc.com/wildlifesurveys.html .

Recent Publications

Rochefort, R. M., M. M. Bivin, J. R. Boetsch, L. Grace, **S. Howlin**, S. A. Acker, C. C. Thompson, and L. Whiteaker. 2012. Prairie vegetation monitoring protocol for the North Coast and Cascades Network. Natural Resource Report NPS/NCCN/NRR—2012/538. National Park Service, Fort Collins, Colorado.

Clement, M., Kanwal., 2012. "Simple syllabic calls accompany discrete behavior patterns in cap tive *Pteronotus parnellii*: an illustration of the motivation-structure hypothesis." The Scientific World Journal.

Nomani, S.Z., M.K. Oli, and R.R. Carthy. 2012. Line transects by design: The influence of study design, spatial distribution and density of objects on estimates of abundance. The Open Ecology Journal 5:25-44

Olson, J.T., M.E. Sunquist, **S.Z. Nomani**, and M.K. Oli. 2012. Evaluation of camera-traps as a population estimation technique for wild turkeys. Proceedings of the National Wild Turkey Symposium 10:101-109

Fedy, B.C., C. L. Aldridge, K. E. Doherty, M. O'Donnell, J.L. Beck, B. Bedrosian, M.J. Holloran, G.D. Johnson, N.W. Kaczor, C.P. Kirol, C.A. Mandich, D. Marshall, G. McKee, C. Olson, C.C. Swanson, and B.L. Walker. 2012. Interseasonal movements of greater sage-grouse, migratory behavior, and an assessment of the core regions concept in Wyoming. Journal of Wildlife Management 76: 1062-1071.

Clement, M.J., S.B. Castleberry. 2012. Tree structure and cavity microclimate: implications for bats and birds. International Journal of Biometeorology. doi:10.1007/s00484-012-0569-z.



is <u>G</u>oing Places!



Come visit WEST staff members and learn about all of our comprehensive services at The Wildlife Society 19th Annual Conference, in the Rose City of Portland, Oregon, October 13-18, 2012. The conference will be held at the Oregon Convention Center.

WEST staff member, **Ryan Nielson** will be copresenting a one day workshop while at the conference, "Spatial Statistics in R"

For more information on attending this workshop, please visit:

http://wildlifesociety.org/ workshops



WEST is a proud to be a sponsor of the 2012 National Wind Coordinating Collaborative Research Meeting in Denver, CO November 27-30.

WEST will be exhibiting at this conference, which will also be attended by several of our senior staff members.

WEST Staff Members Attend WINDPOWER 2012

Recently, several WEST staff members traveled to Atlanta, Georgia for WIND-POWER 2012 presented by American Wind Energy Association, June 3-6. WINDPOWER Conference & Exhibition is one of the largest wind-focused exhibitions in the world. It featured over 1,000 exhibitors, including WEST.

Dale Strickland, Wally Erickson, Jeff Gruver, and Michelle Sonnenberg represented WEST at the conference and at our exhibit booth, where they had the opportunity to network with current/potential clients interested in our Wind Energy Services.



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Wally Erickson presented a poster on "Approaches to Assessing Golden Eagle Risk at Wind Energy Sites." Jeff Gruver represented WEST as the bat technical expert on a panel with other experts discussing the interplay of science and policy with regard to wind power and eagles and bats. During this panel the experts addressed questions from a moderator, as well as those from the audience. Michelle Sonnenberg presented as part of a panel called "Siting Impact Assessments: Addressing Pre- and Post-Construction Due Diligence". She presented, "Cost Effective Post-construction Monitoring Approaches", which focused on ways to reduce post-construction monitoring costs, while still meeting the USFWS post-construction monitoring guideline recommendations.

We were excited to introduce our new Wind Energy marketing materials at this exhibition. Our new Wind Energy Guidelines Implementation Tool was also debuted at this event. These new materials can be obtained by contacting our marketing team at marketing@west-inc.com.

Where We've Been

Luke Martinson presented a poster at the 9th INTECOL International Wetland Conference held in Orlando, Florida. The poster was titled, "An Investigation of Peatlands: Floating Mat Fens."

Rhett Good and **Jason Ritzert** attended the Illinois Wind Working Group annual conference, July 17-18 in Normal, Illinois. WEST exhibited our booth while in attendance.

Matt Clement gave an invited talk on bat ecology at Indiana State University as part of their Biology Speaker Series. This talk was titled, "Swamp Bats: Roosting Ecology Under Thermal and Hydrological Extremes."

Matt Clement attended the 4th Annual Midwest Bat Working group meeting at Indiana State University, Terre Haute, Indiana.

Wally Erickson, Dale Strickland, Jeff Gruver, and **Michelle Sonnenberg** attended WIND-POWER 2012 in Atlanta, Georgia. WEST exhibited at the conference and our staff members presented posters and sat on panels discussing numerous Wind Energy Issues.

For additional information on any story contained within this edition of News from the WEST, please send an e-mail to <u>marketing@west-inc.com</u>. In our continuing effort to be an environmentally conscious firm, we only distribute an electronic version of our newsletter.