

Claudine Tobalske

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Dr Claudine Tobalske has over 25 years of combined GIS experience in the field of natural resources conservation and management, starting as a Ph.D. student working for the Wildlife Spatial Analysis Lab at the University of Montana, then as a GIS analyst and ecologist for the Oregon Natural Heritage Information Center, on to her current position at the Spatial Analysis Lab of the Montana Natural Heritage Program. Dr Tobalske has applied remote sensing to vegetation mapping at different scales, from 1m NAIP to 30m Landsat ETM+. She has extensive experience with the full suite of ESRI products and image analysis software such as Erdas Imagine and eCognition.

EDUCATION

1992-1998: Ph.D. Wildlife Biology, University of Montana, Missoula, MT. Dissertation: Modeling the distribution of woodpecker species in the Jura, France, and in Switzerland, using atlas data.

1990-1991: Diplôme d'Etudes Supérieures Spécialisées "Natural Resources and the Environment", University of Nancy I, France. Thesis: Preservation of Avian Diversity in Aspen Forests of Colorado: a Pilot Study. National Ecology Research Center, Fort Collins, CO.

1988-1990: Maîtrise "Biophysiology Applied to Plant Production", University of Angers, France. Thesis: Contribution to the Study of the Genetic Variability of *Alnus glutinosa* L. Gaertn. in its Natural Range. Ecole Nationale du Génie Rural des Eaux et Forêts, Nancy, France.

RECENT EMPLOYMENT

Sept. 08 – present: Ecologist/GIS Analyst, Spatial Analysis Lab, Montana Natural Heritage Program, The University of Montana, Missoula. General position description: improving/updating the statewide landcover layer; generating species-habitat relationship models (plants and wildlife); performing miscellaneous GIS analyses; mapping vegetation through remote sensing, using images ranging from 1m NAIP to 30m Landsat TM scenes. Softwares used: ArcGIS 10, Erdas Imagine 13, eCognition 9.0, Weka, RandomForest in R.

Feb. 99 – June 08: GIS Analyst/Wildlife Ecologist, Oregon Natural Heritage Information Center, Portland, OR. General position description: creating broad-scale digital maps of current and historical vegetation; generating species-habitat relationship models (plants and wildlife); performing miscellaneous GIS analyses. Softwares used: ArcView, ArcGIS, Arc/Info (arcplot, arcedit, grid, aml writing), Erdas Imagine, see5, RandomForest in R, MaxEnt, eCognition 4.0.

SELECTED PUBLICATIONS

- Tobalske, Claudine and Linda Vance. 2017. Predicting the distribution of Russian Olive stands in eastern Montana valley bottoms using NAIP imagery. Report to the US EPA. Montana Natural Heritage Program. Helena, MT. 40pp.
- Hahn, Jamul, Claudine Tobalske, Melissa Hart, and Linda Vance. 2016. Montana Wetland Ecological and Vulnerability Prioritization. Report to Montana Department of Environmental Quality and Montana Fish, Wildlife, and Parks. Montana Natural Heritage Program, Helena, Montana. 41 pp. plus appendices.
- Maher, C.T. and C. Tobalske. 2015. Does Whitebark Pine (*Pinus albicaulis*) have a refuge from Mountain Pine Beetle (*Dendroctonus ponderosae*) at treeline? Poster presentation at the Whitebark Pine Ecosystem Foundation Annual Meeting. Ashland, OR. September 18, 2015.
- Buechling, A., and C. Tobalske. 2011. Predictive Habitat Modeling of Rare Plant Species in Pacific Northwest Forests. *West. J. Appl. For.* 26(2):71-81.
- Polaski, S., E. Nelson, J. Camm, B. Csuti, P. Fackler, E. Lonsdorf, C. Montgomery, D. White, J. Arthur, B. Garber-Yonts, R. Haight, J. Kagan, A. Starfield, and C. Tobalske. Where to Put Things? Spatial Land Management to Sustain Biodiversity and Economic Returns. *Biological Conservation* 141:1505-1524.
- Kagan, J.S., C. Tobalske, and J.C. Hak, 2008. Final Report of Land Cover Mapping Methods, Map zone 18, PNW ReGap. Institute for Natural Resources, Oregon State University, Corvallis, OR.
- Tobalske, C. 2002. Effects of Spatial Scale on the Predictive Ability of Habitat Models for the Green Woodpecker in Switzerland. Chapter 15 (pp 197-205) *in* Predicting Species Occurrences: Issues of Accuracy and Scale. J.M. Scott et al. eds., Island Press, Washington.
- Tobalske, C., and B.W. Tobalske. 1999. Using atlas data to model the distribution of woodpecker species in the Jura, France. *Condor* 101:472-483.