

SAHM:VisTrails (Software for Assisted Habitat Modeling for VisTrails)—**Training Course**

Offered by the Invasive Species Science Branch of the U.S. Geological Survey–Fort Collins Science Center and the North Central Climate Science Center of the U.S. Department of the Interior

Software for Assisted Habitat Modeling (SAHM) for VisTrails



VisTrails is an open-source management and scientific workflow system designed to integrate the best of both scientific workflow and scientific visualization systems. Developers can extend the functionality of the VisTrails system by creating custom modules for bundled VisTrails packages. The Invasive Species Science Branch of the U.S. Geological Survey (USGS) Fort Collins Science Center (FORT) and the U.S. Department of the Interior's North Central Climate Science Center have teamed up to develop and implement such a module—the Software for Assisted Habitat Modeling (SAHM). SAHM expedites habitat modeling and helps maintain a record of the various input data, the steps before and after processing, and the modeling options incorporated in the construction of an ecological response model. There are four main advantages to using the SAHM:VisTrails combined package for species distribution modeling:

- 1. Formalization and tractable recording of the entire modeling process.
- 2. Easier collaboration through a common modeling framework.
- 3. A user-friendly graphical interface to manage file input, model runs, and output.
- 4. Extensibility to incorporate future and additional modeling routines and tools.

In order to meet increased interest in the SAHM:VisTrails package, the FORT offers a training course twice a year. The course includes a combination of lecture, hands-on work, and discussion. Please join us and other ecological modelers to learn the capabilities of the SAHM:VisTrails package.

About the Course

During this course, participants will

- learn the functionality and use of the SAHM: VisTrails package,
- get an overview of the statistical packages included in SAHM, and
- work through an example species distribution dataset.

After this course, participants will be prepared to

- understand and apply the SAHM: VisTrails package to their own datasets and
- be a part of the SAHM: VisTrails user community.

Location

Resource for Advanced Modeling USGS Fort Collins Science Center 2150 Centre Avenue, Building C Fort Collins, Colorado







Over the past several years, the FORT has established its Resource for Advanced Modeling facility. This facility was designed to be a collaborative workspace where resource managers could meet with USGS scientists to develop predictive ecological response models. The space features upgraded technology, such as laptop networking and a 24-monitor VisWall, that supports a synergistic environment. For more information on the Resource for Advanced Modeling, see *http://www.fort.usgs.gov/ram/*.

Dates

2014	September 9–10
2015	March 24–25 September 8–9
2016	March 22–23 September 6–7

For More Information on SAHM and VisTrails

- http://www.fort.usgs.gov/products/software/sahm/
- http://vistrails.org/index.php/Main Page
- Morisette, J.T., Jarnevich, C.S., Holcombe, T.R., Talbert, C.B., Ignizio, Drew, Talbert, M.K., Silva, Claudio, Koop, David, Swanson, Alan, and Young, N.E., 2013, VisTrails SAHM—Visualization and workflow management for species habitat modeling: Ecography, v. 36, no. 2, p. 129–135, *http://dx.doi.org/10.1111/j.1600-0587.2012.07815.x.*

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Contact Information

Tracy Holcombe, Training Coordinator *Holcombet@usgs.gov*

Catherine Jarnevich, Instructor *Jarnevichc@usgs.gov*

Colin Talbert, Developer talbertc@ugsg.gov

Marian Talbert, Developer mtalbert@usgs.gov