

# ANIMOVE

2014

```

P1.x=diag(c(0, 0.001, 0.001))
P1.y=diag(c(0, 0.001, 0.001))

displayPar(mov.model=-1, err.model=list(x=-errX, y=-errY), drift=0,
data=nfsNew, fixPar=c(NA, 1, NA, 1, NA, NA, NA, NA))

fit <- crwMLE(mov.model=-1, err.model=list(x=-errX, y=-errY), drift=0,
data=nfsNew, coord=c("longitude", "latitude"),
Time.name="Time", initial.state=initial.drift,
control=list(maxIter=200, trace=1, REPCOR=10),
initialSANN=list(maxit=300, trace=1, REPCOR=10))

```



## Animal Movement - Remote Sensing - Conservation

“ ... AniMove is a ground-breaking capacity-building contribution [...] great opportunities for students to learn about the cutting edge of movement ecology and the important insights which it opens for conservation” — Thomas Brooks, head of IUCN science and Knowledge

### AniMove: Animal Movement Analysis for Conservation

**Training Course Dates**  
31<sup>th</sup> March – 11<sup>th</sup> April 2014

**Location**  
Smithsonian-Mason School of  
Conservation, Front Royal, VA, USA

organised and funded by



Animal movement is critical for maintenance of ecosystem services and biodiversity. The study of complex movement patterns and of the factors that control such patterns is essential to inform conservation research and environmental management. Technological advances have greatly increased our ability to track, study, and manage animal movements. But analyzing and contextualizing vast amounts of tracking data can present scientific, computational, and technical challenges that require scientists and practitioners to master new skills from a wide range of computational disciplines.

AniMove ([www.animove.org](http://www.animove.org)), a collective of international researchers, teaches a two-week intensive training course on *Animal Movement Analysis for Conservation*. The course focuses on interdisciplinary approaches linking animal movement with environmental factors to address challenging theoretical and applied questions in conservation biology. Focusing on these approaches, participants acquire significant skills in computational ecology, modeling, remote sensing and Geographic Information Systems (GIS).



Elite Network  
of Bavaria



## Animal Movement - Remote Sensing - Conservation

### *AniMove: Animal Movement Analysis for Conservation*

#### 2014 Course Details

For full details and online application form, see *AniMove: Animal Movement Analysis for Conservation* course webpage at:

**[smconservation.gmu.edu](http://smconservation.gmu.edu)**

#### Course Cost:

\$3478 USD (includes accommodation and meals); \$2578 USD for applications of citizens of "less-developed" nations. Limited scholarship opportunities.

**Apply by: January 20, 2014**

**Payment due: February 4, 2014**

#### Course Prerequisite:

Prior working knowledge of R, including the ability to write and troubleshoot scripts for processing and analyzing data. Remote sensing, open source GIS, and modeling knowledge are advantageous but not mandatory. To complete the R scripting evaluation exercise, see the *AniMove* webpage at **[smconservation.gmu.edu](http://smconservation.gmu.edu)**.

#### Questions?

Visit **[smconservation.gmu.edu](http://smconservation.gmu.edu)** or contact **[SCBItraining@si.edu](mailto:SCBItraining@si.edu)**

#### Course At-A-Glance:

Week 1: Learn new skills through lectures and hands-on exercises in data collection, management, analysis and modeling approaches.

Week 2: Work in small groups on conservation projects. Datasets and related research questions are provided by course participants or instructors.

Course uses only open source software (R, GRASS, QGIS), and mostly open-access environmental datasets.

Evening lectures by noted conservation scientists, movement ecologists, and remote sensing experts supplement instruction, providing the broader context of animal movement and remote sensing analysis.

#### *AniMove Instructors Include:*

Martin Wegmann (LSFE-UW, CEOS, DLR)  
Kamran Safi (MPI-O)  
Nathalie Pettorelli (ZSL)  
Peter Leimgruber (SCBI)  
Justin Calabrese (SCBI)  
Ned Horning (AMNH)

**To learn more about AniMove, see**

**[www.animove.org](http://www.animove.org)**