Overview: Better assessments of the current patterns of biodiversity, species distributions, and population densities are needed in order to predict biodiversity responses to changing environments. Indices derived from satellite data can be a key resource for such biodiversity assessments. Today, over a decade of MODIS satellite observations provide a unique opportunity to develop indices that are relevant, consistent, and applicable for biodiversity assessments. The Dynamic Habitat Index, in particular, has shown great promise for such assessments.

Our NASA-funded study has two major goals. The first is technical: we will derive the Dynamic Habitat Index from the entire MODIS data record, quantify its robustness, and make it widely available. The second goal is an applied research question: we will assess the DHI as a predictor of alpha- and beta-diversity, species occurrences, and species abundances.

The project is the result of a collaboration between UW-Madison (V. Radeloff, A. Pidgeon, A. Ives, and M. Clayton), the University of British-Columbia (N. Coops), Stony Brook University (C. Graham), Sapienza University of Rome (C. Rondini), IUCN (T. Brooks), and Humboldt University in Berlin (T. Kuemmerle).

Position: We are offering one postdoctoral position for two years. The appointment will be as a research associate. Salary is competitive and commensurate with experience. The position is available starting September 1st 2014. The University of Wisconsin – Madison is an equal opportunity/affirmative action employer. We promote excellence through diversity and encourage all qualified individuals to apply.

The university has a long history of excellence in remote sensing, ecology, conservation biology, and geography. The postdoc will be based in the SILVIS lab (http://silvis.forest.wisc.edu/), and supervised by V. Radeloff and A. Pidgeon.

UW-Madison is a major research university in the United States ranking consistently among the top-five university in research expenditures among all U.S. universities. Total student enrollment is 43,000 of which more than 12,000 are graduate and professional students, and there are over 2000 faculty. It is an exciting place to learn and conduct research.

The city of Madison ranks as one of the top places in the U.S. to live and work. For information about the campus and city of Madison, please see http://www.wisc.edu/about/

Qualifications: We seek candidates who work well in a collaborative setting and have excellent communication and writing skills. Good English writing and verbal communication skills, as well as the ability to work in a team, are essential. Applicants must have completed a Ph.D. in remote sensing, ecology, geography, environmental science or a related field prior to appointment. Candidates should have a strong background in remote sensing and ecology, and demonstrated skills in the processing and handling of large datasets, statistical modeling, spatial ecology, and GIS.

To apply: Candidates should send a cover letter summarizing their research interests, a CV, and the contact information for three references. Application packages need to be compiled into one, single PDF file, and sent to slschmid@wisc.edu.

Review of applicants will begin immediately, but the position will remain open until a suitable candidate is found. Applications received by July 15th 2014 are guaranteed consideration.