## Annual Report IAVS Working Group for Ecoinformatics May 2011

In 2007 Susan Wiser, Nick Spenser, and Robert Peet organized on behalf of the IAVS Ecoinformatics Working Group an initiative to establish an international exchange standard for vegetation plot data. Meetings were held in 2007 and 2008 at the National Evolutionary Synthesis Center in Durham, NC, USA. After the meetings a core group consisting of Miquel De Cáceres, Martin Kleikamp, Jerry Cooper, Michael Lee, Matt Jones, Robert Peet, Nick Spenser, and Susan Wiser developed a draft schema. Nick Spenser presented this schemat to TDWG (the Biodiversity Information Standards organization) at its meeting in Perth in October 2008. This led to the formation of a Vegetation Observations Data Exchange Task Group as a subgroup of the TDWG Observations and Specimen Records Interest Group. The current draft schema can be seen on the TDWG website (http://wiki.tdwg.org/Vegetation/). Subsequently, the core elements of the schema were expanded and developed as a manuscript for Journal of Vegetation Science to be published in fall 2011 (Wiser, S.K., N. Spencer, M. De Cáceres, M. Kleikamp, B. Boyle, & R.K. Peet. 2011. Veg-X -- An international exchange standard for plotbased vegetation data). We hope the resultant exchange standard will be endorsed and adopted by both TDWG and IAVS, and will facilitate the rapid development of vegetation plot data sharing internationally.

Jürgen Dengler, Florian Jansen, Falko Glöckler and nine other Working Group members have developed and described GIVD, the Global Index of Vegetation-Plot Databases (http://www.givd.info). GIVD is an index of digital plot databases and currently described in excess of 132 databases containing more than 2.44 million plots with More than 4.54 million plots observations. The vegetation-plot data registered in GIVD constitute a major resource for biodiversity research, both through the large number of species occurrence records and the storage of species co-occurrence information at a small scale, combined with structural data and plot-based environmental data. The database and associated data will be described in more detail in a forthcoming issue of Journal of Vegetation Science (Dengler, J., Jansen, F., Glöckler, F., Peet, R.K., De Cáceres, M., Chytrý, M., Ewald, J., Oldeland, J., Finckh, M., Mucina, M., Schaminée, J.H.J., & Spencer, S. 2011. The Global Index of Vegetation-Plot Databases: a new resource for vegetation science). Additionally, all databases registered in GIVD will be represented in a standardized manner in Database Reports to be published in a Special Volume of Biodiversity & Ecology (eds. Dengler, Chytrý, Ewald, Finckh, Jansen, Lopez-Gonzalez, Oldeland, Peet & Schaminée), due in fall to winter 2011. This volume thus will give a comprehensive overview of existing databases and will be available also open access online. Databases not yet registered in GIVD are invited to do so to increase the utility of GIVD and the visibility of their database – filling in the online forms only needs approx. half an hour.

In February 2010, the 9th international Meeting on Vegetation Databases was held in Hamburg, Germany, with a theme of "Vegetation databases and climate change." It was jointly organized by the German working group on vegetation databases (a section of NetPhyD) and by the IAVS Working Group

for Ecoinformatics. With 142 participants from 28 countries, it was one of the largest and most diverse ecoinformatics conferences ever. Fourteen selected contributions of this conference are in press as a Special Issue of *JVS* (due in fall 2011), further papers will follow in a Special Volume of *Biodiversity & Ecology*. The next international Meeting on Vegetation Databases organized by the NetPhyD section will be held 19-21 September 2011 in Freising (near Munich) with an organizing theme of "vegetation databases and spatial analysis." For further information contact Jörg Ewald (joerg.ewald@hswt.de).

Respectfully submitted, Robert K. Peet