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Title: *An International Arctic Vegetation Database for panarctic vegetation classification, ecosystem models, and biodiversity studies*

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Abstract text:

Georeferenced plot-based vegetation data are needed to understand factors that shape Arctic plant communities, to map distributions of species and plant communities, and to assess vegetation changes in space and time through the use of predictive models. This is particularly important now because Arctic vegetation is responding rapidly to the effects of climate change. The goal of the International Arctic Vegetation Database (IAVD) is to unite and harmonize the vegetation data from the Arctic tundra biome for use in developing a panarctic vegetation classification and as a resource for climate-change and biodiversity research (Walker and Raynolds 2011). This open-access database would be the first to represent an entire global biome. More than 20,000 vegetation plots (relevés) are available for inclusion in the database. Two workshops at Aarhus University in 2012 set the stage for the IAVD and its application to biodiversity spatial distribution models (Walker et al. 2013). The workshops developed a strategy for harmonizing the relevé data and database approaches available in the various Arctic countries, produced a list of accepted arctic vegetation species names and their synonyms that will be used in the IAVD, laid the foundation for prototypes vegetation databases for Greenland and northern Alaska, and highlighted promising methods for modelling and predicting biodiversity trends from patterns in the plant distribution data. The Nordic Network on Climate and Biodiversity (CBIO-NET) project and the Conservation of Arctic Flora and Fauna (CAFF) sponsored the workshops. A third workshop sponsored by the International Arctic Science Committee (IASC) at the 2013 Arctic Science Summit Week will initiate the task of bringing the circumpolar Arctic vegetation science community together to populate the database.

Walker, D. A., I. G. Alsos, C. Bay, N. Boulanger-Lapointe, A. L. Breen, H. Bültmann, T. Christiansen, C. Damgaard, F. J. A. Daniëls, S. M. Hennekens, P. C. Le



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Walker, D. A., and M. K. Raynolds. 2011. An International Arctic Vegetation Database: A foundation for panarctic biodiversity studies. CAFF Strategy Series Report nr. 5, Conservation of Arctic Flora and Fauna, Akureyri, Iceland, 29 pp.