Short Database Report

China Forest-Steppe Ecotone Database

Hongyan Liu & Fengjun Zhao

Abstract: The China Forest Steppe Ecotone Database (GIVD ID AS-CN-001) contains relevés of the forest-steppe ecotone, typical steppe and desert steppe in central part of Inner Mongolia, China as well as of the Zamin Ude region in Mongolia. Relevés of the forest-steppe ecotone were recorded during the 1990s. The communities in the forest-steppe ecotone are classified in a phytocoenological way. 12 major types of forest, shrubland, meadow, fen, open woodland and steppe are differentiated and described according to 133 relevés. Due to limited releves, the plant communities are named by their dominant species: 1. *Quercus mongolica*-woodland; 2. *Betula platyphylla*-woodland; 3. *Betula dahurica*-woodland; 4. *Populus davidiana*-woodland; 5. *Picea meyeri*-woodland; 6. *Pinus tabulaeformis*-woodland; 7. *Ostryopsis davidiana*-shrubland; 8. *Polygonum viviparum*-meadow; 9. *Ranunculus japonica*-fen; 10. *Stipa baicalensis*-steppe; 11. *Leymus chinensis*-steppe; 12. *Ulmus pumila*-open woodland. Other plant community types with less than 5 releves are *Larix principis-ruprechtii*-woodland, *Pinus - Betula fruticosa*-scrub, *Stipa krylovii*-steppe, *Filifolium sibiricum*-steppe and *Thymus serphyllum*-steppe. During the 2000s, we extended our survey further to the dryer region, including typical steppes and desert steppes in central Inner Mongolia of China, including the huge sandy sheets, Otindag and Mu Us. Besides relevé records, we systematically collected 344 soil profiles, with C, N content measured for most of the profiles, as well as grain sizes for all the profiles.

Keywords: desert steppe; forest-steppe ecotone; Inner Mongolia; typical steppe.

GIVD Database ID: AS-CN-001		**Last update:** 2012-05-06
China Forest-Steppe Ecotone Database		
Scope: All available releves with plot sizes of 4 m² for grasslands, 16 m² for shrubland and 100 m² for forest communities from study region (Inner Mongolia, Northeast China and southeast of Mongolia).		
Status: completed and continuing	**Period:** 1995-2010	
Database manager(s): Hongyan Liu (lhy@urban.pku.edu.cn); Fengjun Zhao (shaylapku@gmail.com)		
Owner: Hongyan Liu (private)		
Web address: http://to be established in 2 months		
Availability: [NA]	**Online upload:** no	**Online search:** no
Database format(s): Excel	**Export format(s):** [NA]	
Publication: Liu, H.-Y., Cui, H.-T., Pott, R. and Speier, M., 2000, Vegetation of the woodland-steppe ecotone in southeastern Inner Mongolia, China. Journal of Vegetation Science, 11(4): 525-532		
Plot type(s): normal plots	**Plot-size range:** 4-100 m²	
Non-overlapping plots: 356	**Estimate of existing plots:** [NA]	**Completeness:** [NA]
Total plot observations: 356	**Number of sources:** 1	**Valid taxa:** 659
Countries: CN: 92.0%; MN: 8.0%		
Forest: [NA] — **Non-forest:** [NA]		
Guilds: all vascular plants: 100%		
Environmental data: altitude: 100%; slope aspect: 5%; slope inclination: 5%; soil depth: 8%; surface cover other than plants (open soil, litter, bare rock etc.): 90%; other soil attributes: 90%		
Performance measure(s): cover: 100%; biomass: 10%		
Geographic localisation: GPS coordinates (precision 25 m or less): 100%		
Sampling periods: 1990-1999: 17.7%; 2000-2009: 76.1%; 2010-2019: 6.2%		
Information as of 2012-07-12; further details and future updates available from http://www.givd.info/ID/AS-CN-001		

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