

GLOBIO references and table for land use in grasslands and shrubs

This document contains the references to all the articles used in determining the relationship between land uses and remaining biodiversity in grassland and shrubs biomes within GLOBIO. Below the table of derived MSA values is shown.

- Andersen, A.N., Ludwig, J.A., Lowe, L.M., & Rentz, D.C.F. (2001) Grasshopper biodiversity and bioindicators in Australian tropical savannas: Responses to disturbance in Kakadu National Park. *Austral Ecology*, **26**, 213-222.
- Aumann, T. (2001) The structure of raptor assemblages in riparian environments in the south-west of the Northern Territory, Australia. *Emu*, **101**, 293-304.
- Bouyer, J., Sana, Y., Samandougou, Y., Cesar, J., Guerrini, L., Kabore-Zongrana, C., & Dulieu, D. (2007) Identification of ecological indicators for monitoring ecosystem health in the trans-boundary W Regional park: A pilot study. *Biological Conservation*, **138**, 73-88.
- Cagnolo, L., Molina, S.I., & Valladares, G.R. (2002) Diversity and guild structure of insect assemblages under grazing and exclusion regimes in a mountain grassland from Central Argentina. *Biodiversity and Conservation*, **11**, 407-420.
- Clark, B.K., Clark, B.S., Homerding, T.R., & Munsterman, W.E. (1998) Communities of small mammals in six grass-dominated habitats of southeastern Oklahoma. *American Midland Naturalist*, **139**, 262-268.
- Fabricius, C., Burger, M., & Hookey, P.A.R. (2003) Comparing biodiversity between protected areas and adjacent rangeland in xeric succulent thicket, South Africa: arthropods and reptiles. *Journal of Applied Ecology*, **40**, 392-403.
- Fletcher, R.J. & Koford, R.R. (2002) Habitat and landscape associations of breeding birds in native and restored grasslands. *Journal of Wildlife Management*, **66**, 1011-1022.
- Hart, R.H. (2001) Plant biodiversity on shortgrass steppe after 55 years of zero, light, moderate, or heavy cattle grazing. *Plant Ecology*, **155**, 111-118.
- Herremans, M. (1998) Conservation status of birds in Botswana in relation to land use. *Biological Conservation*, **86**, 139-160.
- O'Connor, T.G. (2005) Influence of land use on plant community composition and diversity in Highland Sourveld grassland in the southern Drakensberg, South Africa. *Journal of Applied Ecology*, **42**, 975-988.
- Sarmiento, L., Llambi, L.D., Escalona, A., & Marquez, N. (2003) Vegetation patterns, regeneration rates and divergence in an old-field succession of the high tropical Andes. *Plant Ecology*, **166**, 63-74.
- Shochat, E., Stefanov, W.L., Whitehouse, M.E.A., & Faeth, S.H. (2004) Urbanization and spider diversity: influences of human modification of habitat structure and productivity. *Ecological Applications*, **14**, 268-280.
- Smart, R., Whiting, M.J., & Twine, W. (2005) Lizards and landscapes: integrating field surveys and interviews to assess the impact of human disturbance on lizard assemblages and selected reptiles in a savanna in South Africa. *Biological Conservation*, **122**, 23-31.
- Sonderstrom, B., Kiema, S., & Reid, R.S. (2003) Intensified agricultural land-use and bird conservation in Burkina Faso. *Agriculture, Ecosystems and Environment*, **99**,

113-124.

- Utrera, A., Duno, G., Ellis, B.A., Salas, R.A., De Manzione, N., Fulhorst, C.F., Tesh, R.B., & Mills, J.N. (2000) Small mammals in agricultural areas of the western llanos of Venezuela: community structure, habitat associations, and relative densities. *Journal of mammology*, **81**, 536-548.
- Wang, Y., Shiyomi, M., Tsuiki, M., Tsutsumi, M., Yu, X., & Yi, R. (2002) Spatial heterogeneity of vegetation under different grazing intensities in the Northwest Heilongjiang Steppe of China. *Agriculture, Ecosystems and Environment*, **90**, 217-229.
- Woinarski, J.C.Z., Andersen, A.N., Churchill, T.B., & Ash, A.J. (2002) Response of ant and terrestrial spider assemblages to pastoral and military land use, and to landscape position, in a tropical savanna woodland in northern Australia. *Austral Ecology*, **27**, 324-333.
- Woinarski, J.C.Z. & Ash, A.J. (2002) Responses of vertebrates to pastoralism, military land use and landscape position in an Australian tropical savanna. *Austral Ecology*, **27**, 311-323.
- Wu, J., Fu, C., Chen, S., & Chen, J. (2002) Soil faunal responses to land use: effect of estuarine tideland reclamation on nematode communities. *Applied Soil Ecology*, **21**, 131-147.
- Yeates, G.W. & Saggar, S. (1998) Comparison of soil microbial properties and fauna under tussock-grassland and pine plantation. *Journal of the Royal Society of New Zealand*, **28**, 523-535.
- Zeidler, J., Hanrahan, S., & Scholes, M. (2002) Termite species richness, composition and diversity on five farms in southern Kunene region, Namibia. *African Zoology*, **37**, 7-11.

Grasslands and scrubs

Reference	Taxon	Primary vegetation	Lightly used vegetation	Secondary vegetation	Wood plantation	Agroforestry	Perennial tree crop	Traditional farming	Conventional farming	Pasture
Andersen et al., 2001	Insects	1.00	0.41	0.21						
Aumann, 2001	Birds	1.00								0.61
Bouyer et al., 2007	Herbaceous Plants	1.00	0.53	0.40		0.30	0.19	0.41		
Bouyer et al., 2007	Insects	1.00	0.87	0.34			0.17	0.43		
Cagnolo, L. et al. 2002	Insects		1.00							0.20
Clark et al., 1998	Mammals	1.00	0.50							0.50
Fabricius, et al., 2003	Reptiles	1.00								0.54
Fletcher, R.J. Koford, R.R. 2002	Birds	1.00		0.77						
Hart, 2001	Herbaceous Plants	1.00								0.55
Herremans, M. 1998	Birds	1.00	0.66							0.85
O'connor, 2005	Herbaceous Plants	1.00			0.26					0.73
Sarmiento et al., 2003	Herbaceous Plants	1.00		0.52						
Shochat et al., 2004	other Arthropods	1.00							0.60	
Smart et al., 2005	Reptiles	1.00								0.88
Sonderstrom, B. et al. 2003	Birds			0.77				0.71		
Utrera et al., 2000	Mammals	1.00						0.42	0.60	0.35
Wang, Y et al. 2002	Herbaceous Plants		1.00							0.42
Woinarski & Ash, 2002	Birds	1.00	0.78							
Woinarski & Ash, 2002	Mammals	1.00	0.73							
Woinarski & Ash, 2002	Reptiles	1.00	0.50							
Woinarski et al., 2002	Insects	1.00	0.64							
Wu et al., 2002	Other invertebrates	1.00							0.09	
Yeates et al., 1998	Other invertebrates	1.00	0.64		0.57					
Zeidler et al. 2002	Insects		1.00							0.54
Mean		1.00	0.71	0.50	0.42	0.30	0.18	0.49	0.43	0.56
Maximum likelihood estimate		1.00	0.67	0.44				0.32		0.54
standard error			0.05	0.11				0.07		0.06