# The relevance of meaningful nature experience & connectedness with nature for invasive species action

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Connectedness with nature (CWN): extent to which an individual includes nature within their cognitive representation of self (1). Comprises affective (i.e. emotional) & behavioral attributes that respect the relatedness between oneself & the rest of nature.

Meaningful nature experience (MNE): non-ordinary experiences with/in nature that are particularly profound, important, affective & difficult to describe (2). May include awakening, peak, flow, mystical, 'satori', spiritual & synchronistic experiences with nature.

#### **WHY RELEVANT? (RESULTS)**

MNE influences\* environmental behaviour (99% agree, n= 65) & outlook on life (94% agree, n= 65); MNE frequency correlates with greater CWN ( $r_s$  = 0.39; p-value = <0.01; n = 172) (3). CWN motivates biospheric concern & conservation behaviour (4); Invasive alien species (IAS) influence\* MNE (Fig. 1); MNE may shift perceptions of IAS toward empathy, responsibility & social-ecological connection (Fig. 2).

#### **HOW? (METHODOLOGY)**

Knowledge interest: Intepretative

Paradigm: Pragamatism

Approach: Mixed methods (Qualitative / Quantitative)

*Methods:* Likert-scale surveys; In-depth interviews (purposive & random sampling); In-situ participation

Analysis: Statistical (e.g. ANOVA) & Descriptive;

Phenomenological & Content analysis

Outreach: Field courses; Workshops; Online media.

Citations (1-7): See over: Reference List

Fig. 1: Extent to which IAS are perceived to affect MNE (with common themes accompanying responses) n=187



### **Poster Citations**

- (1): Schultz (2002); Mayer & Frantz (2004)
- (2): Adapted from Swan (2010); Morse (2011)
- (3): As measured with Mayer & Frantz's (2004) Connectedness to Nature Scale
- (4): Kals et al. (1999); Mayer & Frantz (2004); Nisbet et al. (2009); Gosling & Williams (2010); Schultz (2011)
- (5): The U-Curve is licensed under Creative Commons by the Presencing Institute Otto Scharmer: www.presencing.com/permissions
- (6): Based on the title of a RadioLIVE interview with Bruce Warburton, Landcare NZ
- (7): Carruthers et al. (2011, p. 817)

## **Reference List**

Carruthers, J., L. Robin, J. P. Hattingh, C. A. Kull, H. Rangan, and B. W. van Wilgen. 2011. A native at home and abroad: the history, politics, ethics and aesthetics of acacias. *Diversity and Distributions* 17:810–821.

Frantz, C., F. Mayer, C. Norton, and M. Rock. 2005. There is no "I" in nature: The influence of self-awareness on connectedness to nature. *Journal of Environmental Psychology* 25:427–436.

Gosling, E., and K. J. H. Williams. 2010. Connectedness to nature, place attachment and conservation behaviour: Testing connectedness theory among farmers. *Journal of Environmental Psychology* 30:298–304.

Kals, E., D. Schumacher, and L. Montada. 1999. Emotional affinity toward nature as a motivational basis to protect nature. *Environment and Behavior* 31:178–202.

Mayer, F., and C. Frantz. 2004. The connectedness to nature scale: A measure of individuals feeling in community with nature? *Journal of Environmental Psychology* 24:503–515.

Morse, M. 2011. River experience: a phenomenological description of meaningful experiences on a wilderness river journey. PhD thesis, University of Tasmania.

Nisbet, E. K., J. M. Zelenski, and S. A. Murphy. 2009. The nature relatedness scale: linking individuals' connection with nature to environmental concern and behaviour. *Environment and Behavior* 41:715–740.

RadioLIVE. 2012. Know the enemy, Part 2. http://www.radiolive.co.nz/Environews-Know-The-Enemy-Part-2-Hello-Possums/tabid/506/articleID/29049/Default.aspx *accessed 14/08/2012*.

Schultz, P. W. 2002. Inclusion with nature: the psychology of human-nature relations. Pages 62–78 in P. Schmuck and W. P. Schultz, editors. The Psychology of Human-Nature Relations. Kluwer Academic, Norwell, MA.

Schultz, P. W. 2011. Conservation means behavior. *Conservation Biology* 25:1080–1083.

Swan, J. A. 2010. Transpersonal psychology and the ecological conscience. *The Journal of Transpersonal Psychology* 42:2–25.





More Information & Outreach:

