

**RECENT RESEARCH PAPERS (links to available papers are provided):**

- del Moral, R. & J. H. Titus. 2015 (in Press). Primary Succession on Mount St. Helens: Rates, Determinism and Alternative States. In V. H. Dale and C. C. Crisafulli (eds.), *Ecological Responses at Mount St. Helens: Revisited 35 Years After the 1980 Eruption*. Springer.
- Walker, L. R., N. Hölzel, R. Marrs, R. del Moral & K. Prach. 2014. [Optimization of Intervention levels in ecological restoration](#). *Applied Vegetation Science* 17: 187-192.
- del Moral, R. & B. Magnusson. 2014. [Comparing early succession rates on Mount St. Helens and Surtsey](#). *Biogeosciences* 11: 2099-2111.
- Marler, T.E. & R. del Moral. 2013. Primary succession in Mount Pinatubo: habitat availability and ordination analysis. *Communicative & Integrative Biology* 6:e25924; <http://dx.doi.org/10.4161/cib.25924>
- del Moral, R. (not peer-reviewed) Thirty years of primary succession on Mount St. Helens. Feature paper in BEN #453 (Botanical Electronic Newsletter), available at: <http://www.ou.edu/cas/botany-micro/ben/ben453.html>
- del Moral, R. & D. M. Wood. 2012. [Vegetation development on permanently established grids, Mount St. Helens \(1986-2010\)](#). *Ecology* 93:2125. [Ecological Archives E093-201](#). <http://dx.doi.org/10.1890/12-0344.1>
- del Moral, R., L. A. Thomason, A. C. Wenke, N. Lozanoff & M. D. Abata. 2012. [Primary succession trajectories on pumice at Mount St. Helens, Washington](#). *Journal of Vegetation Science* 23: 73-85.
- Marler, T.E. & R. del Moral. 2011. [Primary succession along an elevation gradient 15 years after the eruption of Mount Pinatubo, Luzon, Philippines](#). *Pacific Science* 65(2): 157-173.
- del Moral, R. 2010c. [Lessons from Mount St. Helens for restoration](#). (Based on seminar at Vienna Botanical Congress, 2005). *Bran-Blanquetia* (Invited paper) 46: 217-223.
- del Moral, R. & E. Poli Marchesse. 2010. [Floristic change during early primary succession on lava, Mount Etna, Sicily](#). *Bran-Blanquetia* (Invited paper) 46: 225-234.
- del Moral, R. 2010a. Thirty years of permanent vegetation plots, Mount St. Helens, Washington (Data Paper). *Ecology* E091:152. See <http://esapubs.org/archive/ecol/E091/152/default.htm>
- del Moral, R. 2010b. [The importance of long-term studies of recovery after the eruption of Kasatochi Island](#). *Arctic, Antarctic & Alpine Research* 42: 335-341.
- del Moral, R, JM Saura & JN Emenegger. 2010. [Primary succession trajectories on a barren plain, Mount St. Helens, Washington](#). *Journal of Vegetation Science* 21: 857-867.
- del Moral, R. 2009a. [Primary succession on Mount St. Helens, with reference to Surtsey](#). *Surtsey Research* 12: 151-155.

- del Moral, R. 2009b. [Increasing deterministic control of primary succession on Mount St. Helens, Washington.](#) *Journal of Vegetation Science* 20: 1145-1154.
- del Moral, R., J. E. Sandler & C. P. Muerdter. 2009. [Spatial Factors Affect Primary Succession on the Muddy River Lahar, Mount St. Helens, Washington.](#) *Plant Ecology* 201: 177-190.
- Walker, L. R. & R. del Moral. 2009. [Lessons from primary succession for restoration of severely damaged habitats.](#) *Applied Vegetation Science* 12: 53-67.
- Walker, L. R. & R. del Moral. 2009. [Transition dynamics in succession: implications for rates, trajectories and restoration.](#) Ch. 3 in: Suding, K. and R. J. Hobbs (eds.), *New Models for Ecosystem Dynamics and Restoration*. Island Press.
- Carey, Susan, A. Ostling, John Harte & R. del Moral. 2007. [Impact of curve construction and community dynamics on the species-time relationship.](#) *Ecology (Concepts and Synthesis)* 88: 2145-2153.
- del Moral, R. 2007. [Limits to convergence of vegetation during early primary succession.](#) *Journal of Vegetation Science* (Invited paper). 18: 479-488.
- del Moral, R. & L. R. Walker. 2007. *Environmental Disasters, Natural Recovery and Human Response*. Cambridge: Cambridge University Press.
- Walker, L. R., J. Walker & R. del Moral. 2007. [Forging a new alliance between succession and restoration.](#) Chapter 1 in L. R. Walker, J. Walker & R. H. Hobbs, *Linking Restoration and Succession in Theory and in Practice*. New York: Springer.
- del Moral, R., L. R. Walker & J. P. Bakker. 2007. [Insights gained from succession for the restoration of structure and function.](#) Chapter 2 in L. R. Walker, J. Walker & R. H. Hobbs, *Linking Restoration and Succession in Theory and in Practice*. New York: Springer.
- Carey, Susan, John Harte & R. del Moral. 2006. [Effect of community assembly and primary succession on the species-area relationship in disturbed systems.](#) *Ecography* 29: 866-872.
- del Moral, R. & I. L. Lacher. 2005. [Vegetation patterns 25 years after the eruption of Mount St. Helens, Washington.](#) *American Journal of Botany* 92: 1948-1956.
- del Moral, R. & L.R. Rozzell. 2005. Long-term effects of *Lupinus lepidus* on vegetations dynamics at Mount St Helens. *Plant Ecology* 181: 203-215.
- Jones, C.C. & R. del Moral. 2005. Patterns of primary succession on the foreland of Coleman Glacier, Washington, USA. *Plant Ecology* 180: 105-116
- Jones, C. C. & R. del Moral. 2005. [Effects of microsite conditions on seedling establishment on the foreland of Coleman Glacier, Washington.](#) *Journal of Vegetation Science* 16: 293-300.
- del Moral, R. & A. J. Eckert. 2005. [Colonization of volcanic deserts from productive patches.](#) *American Journal of Botany* 92: 27-36.
- del Moral, R., D.M. Wood & J.H. Titus. 2005. [Proximity, microsites, and biotic interactions during early succession & ecological responses to the 1980 eruption of Mount St. Helens.](#) In *Ecological Responses to the 1980 Eruption of Mount St.*

- Helens (V. H. Dale, F. Swanson & C. Crisafulli, eds.). Springer-Verlag. pp 93-110.
- del Moral, R. & A. J. Eckert. 2005. [Colonization of volcanic deserts from productive patches](#). *American Journal of Botany* 92: 27-36.
- del Moral, R. & E. E. Ellis. 2004. [Gradients in heterogeneity and structure on lahars, Mount St. Helens, Washington, USA](#). *Plant Ecology* 175: 273-286.
- del Moral, R. 2004. How *Lupinus lepidus* affects primary succession on Mount St. Helens. In: E. van Santen (ed.), Wild and Cultivated Lupins from the Tropics to the Poles. Proc. 10th International Lupin Conference, Laugarvatn, Iceland, 19-24 June, 2002. Int. Lupin Association, Canterbury, New Zealand. Pg. 208-215.
- Davis, Mark, Jan Pergl, Anne-Marie Truscot, Jan Bakker, Karel Prach, Anne-Helene Prieur-Richard, Roos Veeneklaas, Petr Pysek, R. del Moral, Richard Hobbs, Scott Collins & S. T. A. Pickett. 2004. [Vegetation change: a reunifying concept in plant ecology](#). *Perspectives in Plant Ecology, Systematics and Evolution* 7: 69-76.
- Walker, L.R. & R. del Moral. 2003 *Primary succession and Ecosystem Rehabilitation*. Cambridge University Press, Cambridge, UK. March, 2003.
- Fuller, R. N. & R. del Moral. 2003. [The role of refugia and dispersal in primary succession on Mount St. Helens, Washington](#). *Journal of Vegetation Science* 14: 637-644.
- del Moral, R & C. C. Jones. 2002. [Early spatial development of vegetation on pumice at Mount St. Helens](#). *Plant Ecology*. 162: 9-22.
- Odland, A. & R. del Moral. 2002. [Primary succession on newly revealed lake shores](#). *Plant Ecology*. 162: 185-198.
- del Moral, R. 2000a. [Succession and species turnover on Mount St. Helens, Washington](#). *Acta Phytogeographica Suecica* 85: 53-62.
- del Moral, R. 2000b. [Local species turnover on Mount St. Helens](#). P. 195-197, in Proc. 41st Symposium of the IUVS (P. White, editor).
- Wood, D.M., & del Moral, R. 2000. [Seed rain during early primary succession on Mount St. Helens, Washington](#). *Madroño* 47: 1-9.
- del Moral, R. 1999. [Predictability of primary successional wetlands on pumice, Mount St. Helens](#). *Madroño* 46: 177-186.
- del Moral, R. 1999. [Plant succession on pumice at Mount St. Helens](#). *American Midland Naturalist* 141: 101-114.
- del Moral, R. & S. Yu. Grishin. 1999. [The consequences of volcanic eruptions](#). In L. R. Walker (ed.), *Ecosystems of Disturbed Ground*, Chapter 5; *Ecosystems of the World Series* (D. W. Goodall (Editor-in-Chief), Elsevier Science, Amsterdam.
- Dlugosch, K. & R. del Moral. 1999. [Vegetational heterogeneity along environmental gradients](#). *Northwest Science*. 73: 12-18.
- Titus, J. H., P. J. Titus & R. del Moral. 1999. [Wetland development in primary and secondary successional substrates fourteen years after the eruption of Mount St. Helens, Washington, USA](#). *Northwest Science* 73: 186-204.

- del Moral, R. 1998. [Early succession on lahars spawned by Mount St. Helens](#). *American Journal of Botany* 85: 820-828.
- Titus, J. H., R. del Moral & S. Gamiet. 1998. The distribution of vesicular-arbuscular mycorrhizae on Mount St. Helens, Washington. *Madroño* 45: 162-170.
- Titus, J. H. & R. del Moral. 1998. [Vesicular-arbuscular mycorrhizae influence Mount St. Helens pioneer species in greenhouse experiments](#). *Oikos* 81: 495-510.
- Titus, J. H. & R. del Moral. 1998. Seedling establishment in different microsites on Mount St. Helens, Washington, USA. *Plant Ecology* 134: 13-26.
- Titus, J. H. & R. del Moral. 1998. [The role of mycorrhizae in primary succession on Mount St. Helens](#). *American Journal of Botany* 85: 370-375.
- Tsuyuzaki, S., J. H. Titus & R. del Moral. 1997. [Seedling establishment patterns on the Pumice Plain, Mount St. Helens, Washington](#). *Journal of Vegetation Science* 8: 727-734.
- Grishin, S. Yu., R. del Moral, P. V. Krestov, & V. P. Verkholat. 1996. Succession following the catastrophic eruption of Ksudach volcano (Kamchatka, 1907). *Vegetatio* 127: 129-153.
- del Moral, R., J. H. Titus & A. M. Cook. 1995. [Early primary succession on Mount St. Helens, USA](#). *Journal of Vegetation Science* 6: 107-120.
- Tsuyuzaki, S. & R. del Moral. 1995. Species attributes in early primary succession on volcanoes. *Journal of Vegetation Science* 6: 517-522.
- Tsuyuzaki, S. & R. del Moral. 1994. [Canonical correspondence analysis of early succession on Mount Uzu, Hokkaido](#). *Ecological Research* 9: 143-150
- del Moral, R. 1993. Mechanisms of early succession on Mount St. Helens. P. 79-100, in, J. Milne and D. W. H. Walton (eds.), *Primary Succession on Land*, Blackwell, London.
- del Moral, R. & D. M. Wood. 1993a. [Early primary succession on the volcano Mount St. Helens](#). *Journal of Vegetation Science* 4: 223-234.
- del Moral, R. & D. M. Wood. 1993b. [Early primary succession on a barren volcanic plain at Mount St. Helens, Washington](#). *American Journal of Botany* 80: 981-991.
- del Moral, R. & L. C. Bliss. 1993. Mechanism of primary succession: Insights resulting from the eruption of Mount St. Helens. *Advances in Ecological Research* 24: 1-66.
- del Moral, R & DM Wood. 1988a. [Dynamics of herbaceous vegetation recovery on Mount St. Helens, Washington, USA, after a volcanic eruption](#). *Vegetatio* 74: 11-27.
- del Moral, R & DM Wood. 1988b. [The high elevation flora of Mount St. Helens, Washington](#). *Madroño* 35: 309-319.
- Wood, D.M. & R. del Moral. 1988. [Colonizing plants on the Pumice Plains, Mount St. Helens, Washington](#). *American Journal of Botany* 75: 1228-1237.
- Wood, D.M. & R. del Moral. 1987. [Mechanisms of early primary succession in subalpine habitats on Mount St. Helens](#). *Ecology* 68: 780-790.

- del Moral, R & CA Clappitt. 1985. [Growth of native plant species on recent volcanic substrates from Mount St. Helens.](#) *American Midland Naturalist* 114: 374-383.
- del Moral, R. 1983. [Initial recovery of subalpine vegetation on Mount St. Helens.](#) *American Midland Naturalist* 109: 72-80.
- del Moral, R. 1981. [Life returns to Mount St. Helens.](#) *Natural History*. 90(5): 36-49.