

CV - Ása L. Aradóttir

(see http://aradottir.weebly.com/cv_english.html for updates)

Current employment

Professor, Faculty of Agricultural and Environmental Sciences, Agricultural University of Iceland (AUI).

Research interests:

- Restoration Ecology, including restoration of severely degraded land, native woodland restoration, restoration in relation to construction of infrastructure; effects of restoration interventions on ecological succession and ecosystem services (including carbon sequestration); evaluation of restoration and urban restoration.
- Synergies between ecological restoration, climate change mitigation, biodiversity conservation and reversal of land degradation.
- Soil conservation and sustainable land-use.

2016-2018 *Director of Research, AUI*

Previous employment

1998-2006: *Department Head: Dept. of Research and Development, Icelandic Soil Conservation Service.*

1990-1998: *Senior Research Scientist, Iceland Forest Research Station, 1990-1998.*

1983-1986: *Research scientist, Agricultural Research Institute of Iceland.*

Education

Ph.D., Range Science, Texas A&M University, 1991.

M.Sc., Biology, Montana State University, 1984.

B.Sc., Biology, University of Iceland, 1981.

Teaching

Courses at the Agricultural University of Iceland in the field of ecology and restoration ecology and sustainable land use.

Teach about ecological restoration and related subjects at the UNU-LRT (United Nations University-Land Restoration Training Program) (see <http://www.unulrt.is/>).

Supervision of M.Sc. & Ph.D. students at AUI, Univ. of Iceland and USA Universities.

Committees and advisory boards (an incomplete list)

- 2018-2021: Chair of expert group 1 to the fourth phase Master Plan for Geothermal and Hydropower development in Iceland. Task of expert group is to evaluate potential projects with regard to natural and cultural heritage, including landscape and wilderness.
- 2019-2020: Steering group for the development of a Soil Conservation Strategy 2020-2030 (according to law no.155/2018).
- 2014-2017: Expert group 1 to the third phase Master Plan for Geothermal and Hydropower development in Iceland.
- 2016-2018: Chair, scientific committee for the 11th SER Europe conference, [*Restoration in the Era of Climate Change*](#), Reykjavík 9-13 Sept. 2018.
- Since 2014: Board of SER Europe Chapter, <http://chapter.ser.org/europe/>
- 2011-2012: Advisory committee to the Minister of Environment. Task: Preparation of “White book” for revision of the Soil Conservation Act.
- 2009-2012: Advisory panel for the Iceland Forest Research Station.
- 2009-2011: Expert council, Natural Science and Environmental Science, The Icelandic Research Fund.
- Since 2007: Advisory board for the United Nations University Land Restoration Training Program ([UNU-LRT](#)).
- 2006-2007: Advisory committee for the Ministry of Environment. Task: Strategies and policy measures for protection and extension of birch woodlands in Iceland.
- Since 2005: Coordination committee for Hekluskógar, a 620 km² restoration program in S-Iceland; chair 2005-2006.
- 2005-2006: Advisory committee for the Minister of Agriculture. Task: Review the institutional structure of the Forestry and Soil Conservation sector in Iceland, and give recommendations to the minister about future scenarios in this regard.
- 2000-2003: Standing Committee for Life and Environmental Sciences (LESC) of the European Science Foundation (ESF).
- 1998-2002: Expert Panel of Natural and Environmental Sciences, Icelandic Research Council. Chair 2000-2002.
- 1998-2002: Representative for Iceland in a Steering Group for the Nordic Environment Strategy for Agriculture and Forestry.
- 1996-1999: Board of the Icelandic Nature Conservation Agency.

Selected publications

Petursdottir, T., S. Baker, and A.L. Aradottir 2020. Functional silos and other governance challenges of rangeland management in Iceland. *Environmental Science and Policy* 105, 37-46. <https://doi.org/10.1016/j.envsci.2019.12.006>

- Aradottir, A. L.**, and G. Halldorsson. 2018. Colonization of woodland species during restoration—seed or safe site limitation? *Restoration Ecology*. 26, S73-S83 <http://onlinelibrary.wiley.com/doi/10.1111/rec.12645/full>
- Rydgren, K., D. Hagen, L. Rosef, B. Pedersen, and **A. L. Aradottir** 2017. Designing seed mixtures for restoration on alpine soils: who should your neighbours be? *Applied Vegetation Science* 20, 317-326. <http://dx.doi.org/10.1111/avsc.12308>
- Petursdottir, T., **A.L. Aradottir**, S. Baker, G. Halldorsson, and B. Sonneveld. 2017. Successes and Failures in Rangeland: an Icelandic Case Study. *Land Degradation & Development*. 28, 34–45. <http://dx.doi.org/10.1002/ldr.2579>
- Svavarsdóttir, K., M. von Schmalensee, **Á.L. Aradóttir**, A. Bau, and R.A. Stefánsson. 2016. A comparison of two eradication methods for the invasive species *Lupinus nootkatensis* in Iceland. *Náttúrufræðingurinn* 86: 5-18.
- Zhang, Y., **A. L. Aradottir**, M. Serpe, and B. Boeken. 2016. Interactions of Biological Soil Crusts with Vascular Plants. Pages 385-406 in B. Weber, B. Büdel, and J. Belnap, editors. *Biological Soil Crusts: An Organizing Principle in Drylands*. Springer International Publishing Switzerland.
- Nilsson, C., **A. L. Aradottir**, D. Hagen, G. Halldórsson, K. Høegh, R. J. Mitchell, K. Raulund-Rasmussen, K. Svavarsdóttir, A. Tolvanen, and S. D. Wilson. 2016. Evaluating the process of ecological restoration. *Ecology and Society* 21(1):41. <http://dx.doi.org/10.5751/ES-08289-210141>
- Berglund, B., L. Hallgren & **A.L. Aradottir** 2015. Stakeholder interaction in participatory land restoration in Iceland: environmental officers' challenges and strategies. *Environmental Management* <http://dx.doi.org/10.1007/s00267-015-0506-0>
- Ólafur Arnalds & Ása L. Aradóttir 2015. [Að lesa og lækna landið](#) [Reading and Healing the Land]. Landvernd, Landgræðsla ríkisins og Landbúnaðarháskóli Íslands, 107 pp.
- Stefansdottir, G., **A.L. Aradottir** and B.D. Sigurdsson 2014. Accumulation of nitrogen and organic matter during primary succession of *Leymus arenarius* dunes on the volcanic island Surtsey, Iceland. *Biogeosciences* 11: 5763-5771, <http://dx.doi:10.5194/bg-11-5763-2014> <http://www.biogeosciences.net/11/5763/2014/>
- Aradottir, A. L.** and D. Hagen. 2013. Ecological Restoration: Approaches and Impacts on Vegetation, Soils and Society. In: D. L. Sparks (ed.) *Advances in Agronomy* 120: 173-222. <http://dx.doi.org/10.1016/b978-0-12-407686-0.00003-8>.
- Arnalds, O., B. Orradottir, and **A. L. Aradottir**. 2013. Carbon accumulation in Icelandic desert Andosols during early stages of restoration. *Geoderma* 193:172-179. <http://dx.doi.org/10.1016/j.geoderma.2012.10.018>.
- Petursdottir, T., **A.L. Aradottir** & K. Benediktsson 2013. An evaluation of the short-term progress of restoration combining ecological assessment and public perception. *Restoration Ecology* 21: 75-85. <http://dx.doi.org/10.1111/j.1526-100X.2011.00855.x>.

Aradottir, A.L., T. Petursdottir, G. Halldorsson, K. Svavarsdottir, & O. Arnalds 2013. Drivers of ecological restoration—lessons from a century of restoration in Iceland. *Ecology and Society*, 18(4): 33. <http://dx.doi.org/10.5751/ES-05946-180433>.

Nilsson, C. & **A.L. Aradottir** 2013. Ecological and Social Aspects of Ecological Restoration: New Challenges and Opportunities for Northern Regions. *Ecology and Society*, 18(4): 35. <http://dx.doi.org/10.5751/ES-06045-180435>.

Berglund, B., L. Hallgren, and **A. L. Aradottir**. 2013. Cultivating Communication: Participatory Approaches in Land Restoration in Iceland. *Ecology and Society* 18 (2): 35. <http://dx.doi.org/10.5751/ES-05516-180235>.

Petursdottir, T., O. Arnalds, S. Baker, L. Montanarella, and **A. L. Aradottir**. 2013. A Social-Ecological System Approach to Analyze Stakeholders' Interactions within a Large-Scale Rangeland Restoration Program. *Ecology and Society* 18(2): 29. <http://dx.doi.org/10.5751/ES-05399-180229>.

Hagen, D., K. Svavarsdottir, C. Nilsson, A. Tolvanen, K. Raulund-Rasmussen, **A.L. Aradottir**, A.M. Fosaa, G. Halldorsson 2013. Ecological and social dimensions of ecosystem restoration in the Nordic countries. *Ecology and Society*, 18(4): 34. <http://dx.doi.org/10.5751/ES-05891-180434>

Aradottir, A.L. & G. Oskarsdottir 2013. The use of native turf-transplants for roadside revegetation in a subarctic area. *Icelandic Agricultural Sciences* 26: 59-67. [http://www.ias.is/landbunadur/wgsamvef.nsf/Attachment/Aradottir%20et%20al%202013/\\$file/Aradottir%20et%20al%202013.pdf](http://www.ias.is/landbunadur/wgsamvef.nsf/Attachment/Aradottir%20et%20al%202013/$file/Aradottir%20et%20al%202013.pdf).

Aradottir, A.L. 2012. Turf transplants for restoration of alpine vegetation: does size matter? *Journal of Applied Ecology* 49: 439-446. <http://dx.doi.org/10.1111/j.1365-2664.2012.02123.x>

Magnúsdóttir, M. & **Á.L. Aradóttir** 2011. Leiðir til að fjölga hraungambra og öðrum mosategundum [Propagation of *Racomitrium lanuginosum* and three other moss species]. *Náttúrufræðingurinn* 81 (3-4): 115-122.

Aradóttir, Á. L. & G. Halldórsson (editors) 2011. Vistheimt á Íslandi [Restoration in Iceland]. Agricultural University of Iceland and Soil Conservation Service of Iceland. (in Icelandic with an extended English abstract). 165 pp. http://pdfvef.oddni.is/landgraedslan/vistheimt_a_islandi/

Aradóttir, Ása L. 2009. Landgræðsla, líffræðileg fjölbreytni og náttúruvernd [Restoration, biodiversity and nature conservation]. *Náttúrufræðingurinn* 78: 13–20.

Aradóttir, Ása L. 2009. Book review: Restoring Natural Capital: Science, Business, and Practice. *Ecological Economics* 68 (7): 2178. <http://dx.doi.org/10.1016/j.ecolecon.2008.12.017>.

Aradóttir, Ása L. 2009. The Role of Ecological Restoration and Sustainable Land Management for Biodiversity. In: *Soils, Society & Global Change*. Proceedings of the International Forum Celebrating the Centenary of Conservation and Restoration of Soil

and Vegetation in Iceland 31 August - 4 September 2007, Selfoss, Iceland. (H. Bigas, G.I. Gudbrandsson, L. Montanarella & A. Arnalds, eds.). A joint publication by United Nations University-INWEH, Soil Conservation Service of Iceland, European Commission – Joint Research Centre – Institute for Environment and Sustainability. pp. 88-92.

Pétursdóttir, T. & **Aradóttir, Á.L.** 2008. Beyond ecology. The importance of local acceptance for successful reclamation, an example from Iceland. In: Zdruli, P. and Costantini, E. (Eds). 2008. *Moving ahead from assessments to actions: Could we win the struggle with land degradation?* 5th International Conference on Land Degradation, CIHEAM-IAMB Valenzano, Bari, Italy 18-22 September 2008. Vol. 1, bls. 101-105.

Aradóttir, A.L., B. Orradottir, O. Arnalds & K. Svavarsdottir 2008. Ecological succession after reclamation treatments on an eroded area in Iceland. In: *Towards a sustainable future for European ecosystems – Providing restoration guidelines for Natura 2000 habitats and species*. Proceedings, 6th European Conference on Ecological Restoration Ghent, Belgium, 8-12/09/2008.

Aradóttir, Á.L., K. Svavarsdóttir & A. Bau 2007. Clonal variability of native willows (*Salix pylicifolia* and *Salix lanata*) in Iceland and implications for use in restoration. *Icelandic Agricultural Sciences* 20: 61-72.

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Aradottir, Asa L. 2007. Restoration of birch and willow woodland on eroded areas. In: G. Halldorsson, E.S. Oddsdottir & O. Eggertsson (eds.). *Effects of afforestation on ecosystems, landscape and rural development*. Proceeding of the AFFORNORD conference, Reykholt, Iceland, June 18-33, 2005 Tema Nord 2007: 508, bls. 67-74.

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Lilja Karlsdóttir & **Ása L. Aradóttir**. 2006. Propagation of *Dryas octopetala* L. and *Alchemilla alpina* L. by direct seeding and planting of stem cuttings. *Icelandic Agricultural Sciences* 19: 25-32.

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A.L. Aradottir & T. Eysteinnsson. 2005. Restoration of birch woodlands in Iceland. In: J.A. Stanturf, J.A. & P. Madsen (eds.), *Restoration of boreal and temperate forests*, pp. 195-209. CRC Press, Boca Raton.

Gretarsdottir, J., **A.L. Aradottir**, V. Vandvik, E. Heegaard & H.J.B. Birks. 2004. Long-term effects of reclamation treatments on plant succession in Iceland. *Restoration Ecology* 12: 268-278.

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A. L. Aradottir 2003. Restoration challenges and strategies in Iceland. Briefing papers of the first SCAPE workshop in Alicante (ES), 14-16 June 2003. http://www.scape.org/scape_alicante_2003.pdf.

Vallejo, V.R., Bautista, S., Delgado, J.C, **Aradottir, A.**, and Rojas, E., 2003. Strategies for land restoration. Pages 24-32 in *Methodologies and Indicators for the evaluation of restoration projects*. Proceedings of the first REACTION workshop, June 13-15 2003, Alicante, Spain (<http://www.gva.es/ceam/reaction>)

Arnalds, O., **Á.L. Aradóttir** & G. Guðbergsson. 2002. Organic carbon sequestration by restoration of severely degraded areas in Iceland. In: J.M. Kimble, R. Lal & R.F. Follet (eds.), *Agricultural Practices and Policies for Carbon Sequestration in Soil*, pp 267-280. CRC Press LLC, Boca Raton.

Aradóttir, Á.L., I. Þorsteinsson & S. Sigurðsson. 2001. Distribution and characteristics of birch woodlands in North-Iceland. In: F. E. Wielgolaski (ed.). *Nordic Mountain Birch Ecosystems*, pp. 51-61. UNESCO, Paris, and Parthenon Publishing, Carnforth.

Aradóttir, Á.L. & Ó. Arnalds. 2001. Ecosystem degradation and restoration of birch woodlands in Iceland. In: F. E. Wielgolaski (ed.) *Nordic Mountain Birch Ecosystems*, pp. 295-308. UNESCO, Paris, and Parthenon Publishing, Carnforth.

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Sigurðsson, B.D., **Á.L. Aradóttir** & Ian B. Strachan. 1998. Cover and canopy development of a newly established poplar plantation in south Iceland. *Icelandic Agricultural Sciences* 12, 15-26.

Aradóttir, Á.L., A. Robertson & E. Moore. 1997. Circular statistical analysis of birch colonization and the directional growth response of birch and black cottonwood in south Iceland. *Agricultural and Forest Meteorology* 84, 179-186. [http://dx.doi.org/10.1016/s0168-1923\(96\)02385-4](http://dx.doi.org/10.1016/s0168-1923(96)02385-4).

Aradóttir, Á.L., H. Thorgeirsson, H. McCaughey, I. Strachan & A. Robertson. 1997. Establishment of a black cottonwood plantation on an exposed site in Iceland: Plant

growth and site energy balance. *Agricultural and Forest Meteorology*, 1997, 84, 1-9.
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