

CV - Ása L. Aradóttir

Current employment

Professor, Faculty of Environment, Agricultural University of Iceland (AUI).

Research interests:

- Restoration Ecology:
 - restoration of severely degraded land;
 - restoration in relation to infrastructure construction;
 - urban restoration;
 - effects of restoration interventions on ecological succession and ecosystem services (including carbon sequestration);
 - evaluation of restoration
- Soil conservation and sustainable land-use.

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 AUI (responsible and main teacher):

- *Ecological Restoration and Sustainable Land Use* (3 credits; 6 ECTS);
- *Restoration Ecology* (3-4 credits; 6-8 ECTS)
- *General Ecology* (4 credits; 8 ECTS)
- *Restoration in Iceland — field course* (1 credit; 2 ECTS).

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

Lecturer at the *UNU-LRT (United Nations University-Land Restoration Training Program)*, which is hosted by Agricultural University of Iceland and the Icelandic Soil Conservation Service, for the Icelandic Ministry of Foreign Affairs (<http://www.unulrt.is/>). Main subjects, *Ecological Restoration and Restoration Ecology*.

NOVA Ph.D. course on *Soil Degradation, Erosion and Restoration* (part on restoration ecology).

Committees and advisory boards (an incomplete list)

- 2014-2017: An expert working group to the third phase Master Plan for Geothermal and Hydropower development in Iceland. Task: Evaluate potential projects with regard to nature, cultural heritage, landscape and wilderness.
- 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 Land Restoration Training Program (now a part of the UN University network).
- 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

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 fylgja 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.oddi.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, Á.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.

[http://www.landbunadur.is/landbunadur/wgsamvef.nsf/8bbba2777ac88c4000256a89000a2ddb/b7ffc48bede95e1a002573d300412e02/\\$FILE/Clonal%20variability.pdf](http://www.landbunadur.is/landbunadur/wgsamvef.nsf/8bbba2777ac88c4000256a89000a2ddb/b7ffc48bede95e1a002573d300412e02/$FILE/Clonal%20variability.pdf).

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.
http://www.norden.org/en/publications/publikationer/2007-508/at_download/publicationfile

Ása L. Aradottir & Magnus Johannsson 2006. Ecological restoration with native species in Iceland. In B Krautzer & E Hacker (eds.) *Soil-Bioengineering: Ecological restoration with native plant and seed material*. Conference 5.-9. September 2006, pp. 175-179. HBLFA Raumberg-Gumpenstein..

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. Eysteinsson. 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.

Asa L. Aradottir 2004. Does the Nootka lupin facilitate or impede colonization and growth of native birch in Iceland? In: E. v. Santen & G. D. Hill (eds.) *Wild and Cultivated Lupins from the Tropics to the Poles*. Proceedings of the 10th International Lupin Conference, Laugarvatn, Iceland, 19-24 June 2002), pp. 184-190. International Lupin Association, Canterbury, New Zealand.

Elmarsdóttir, A., **A.L. Aradóttir** & M. J. Trlica. 2003. Microsite availability and establishment of native species on degraded and reclaimed sites. *Journal of Applied Ecology* 40:815-823. <http://dx.doi.org/10.1046/j.1365-2664.2003.00848.x>

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.

Aradóttir, Á.L., K. Svavarssdóttir, P. H. Jónsson & G. Guðbergsson. 2000. Carbon accumulation in vegetation and soils by reclamation of degraded areas. *Icelandic Agricultural Sciences* 13, 99-113.

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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.

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[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.
[http://dx.doi.org/10.1016/S0168-1923\(96\)02370-2](http://dx.doi.org/10.1016/S0168-1923(96)02370-2).

Arnalds, Ó., Á.L. Aradóttir & I. Thorsteinsson. 1987. The nature and restoration of denuded areas in Iceland. *Arctic and Alpine Research*, 19, 518-525.
<http://dx.doi.org/10.2307/1551419>.