Combined presentations of the

Nordic Network for Interdisciplinary Environmental Studies (NIES)\(^1\)

and the research initiative

Inscribing Environmental Memory in the Icelandic Sagas (IEM)\(^2\)

Steven Hartman
Chair of NIES
Mid Sweden University

\(^1\) NABO-NIES IEM Workshop, Thelamork School, Akureyri, Iceland, 9 July 2013

\(^2\) NABO General Meeting, Stefansson Arctic Institute, University of Akureyri, Iceland, 13 July 2013
NIES is a research network devoted to interdisciplinary environmental studies, with a particular ambition to develop this research field within the humanities.

http://www.kth.se/abe/nies


NIES consists of researchers whose work addresses environmental questions from numerous disciplinary angles; the fields of literature, history, architecture, anthropology/archaeology, philosophy, linguistics, geography, landscape studies and cultural studies are well represented in the network.

Research activities within the network focus on environmental integrity, stability, change and sustainability, as well as environmental ethics and aesthetics, as illumined at the intersection of culture and nature.

Combined presentation of NIES & IEM -- July 2013
NIES is supported by a multi-year grant from NordForsk, a joint research council of Sweden, Finland, Denmark, Norway and Iceland organized under the auspices of the Nordic Council of Ministers.

NordForsk

For specific projects/events organized by NIES the network has also received support from The Bank of Sweden Tercentenary Foundation (*Riksbankens Jubileumsfond*), the Research Council of Norway, the Sigtuna Foundation and several other local funding sources and co-sponsoring institutions.
Nordic Network for Interdisciplinary Environmental Studies (NIES)

- Since its founding in 2006 NIES has grown from a group of a dozen researchers based at nine universities in three Nordic countries to its present-day constituency
  - Well over 100 researchers based at dozens of colleges & universities in five Nordic countries with the following national anchoring institutions:
    - **Sweden**
      - Uppsala University
    - **Finland**
      - University of Turku
    - **Iceland**
      - University of Iceland
    - **Denmark**
      - University of Southern Denmark—Odense
    - **Norway**
      - University of Oslo
  - The host institution for NIES during its current NordForsk funding period (i.e. since 2011) is KTH Royal Institute of Technology in Stockholm.
NIES in brief (1)

• NIES was formed in 2006-2007 as a regional forum for ecocritical and environmental history scholarship among a small number of scholars in Sweden, Norway and Denmark. Two additional national groups, Finland and Iceland, joined the network in 2011.

• NIES promotes the production of new knowledge on environmental questions based in or significantly involving subjects and disciplines situated in the humanities. Interdisciplinary frameworks / transdisciplinary linkages are key aspects of the network's approach to research questions and research production, not least the involvement of humanities scholarship within integrated science agendas that draw meaningfully on the natural sciences, social sciences and humanities in concert.

• The gender balance within the network is approximately 55% men / 45% women.
NIES in brief (2)

• The number of researchers active in NIES has doubled since the NordForsk funding period began in 2011 (and has grown more than 10-fold since the network originally formed in 2006-2007), owing in large measure to the network’s:

  — effectiveness in raising the profile of humanities-driven environmental studies in the Nordic countries
  — success in connecting researchers in this field who have been relatively isolated in their institutional settings to a wider research community not just within the Nordic countries, but also beyond this region
  — establishment of new fora throughout the Nordic region at which researchers are able to meet regularly to exchange ideas and share work with one another and to connect with leading scholars in the field internationally
  — organization and sponsorship of new research projects and research training initiatives
  — role in opening new channels for dissemination of Nordic research in the environmental humanities

• New projects organized by NIES are either in development or now getting under way; some of the disciplinary intersections as well as methodological and theoretical innovations helping to define the emergent field of the environmental humanities are being realized in these initiatives.
Overview of NIES’s research coordination and output (1)

NIES has organized numerous international symposia and open scholarly workshops on specific environmental research focuses since 2006. These events have included the following meetings:

- NIES I research symposium: *Writing and Thinking about Nature and American Culture in a Comparative Perspective*, Oslo, Norway, 30 September 2006
- NIES II research symposium *Counter Natures: Revising Nature in an Era of Environmental Crisis*, Uppsala, Sweden, 21-23 November 2009
- NIES III research symposium: *Green Oslo and Beyond: Investigating the Origins and Shaping the Outcomes of Green Urbanism*, Oslo, Norway, 7-8 June 2010
- NIES IV research symposium: *The Anti-Landscape*, Odense, Denmark, 8-10 May 2011
- *Modernisation of Rural Landscape research workshop*, Pori, Finland, 12-13 December 2011
- NIES VI research symposium: *Environmental Policy-making in a Dynamic World*, Hornafjordur & Reykjavik, Iceland, 15-19 May 2012
- *Inscribing Environmental Memory (IEM) exploratory workshop 1*, University of Iceland, Reykjavik, Iceland, 20 May 2012
- *European Cooperation in the Environmental Humanities (ECEH) workshop 1*, 26 September 2012, Oslo, Norway
- NIES VII research symposium: *Environmentalism, Spatiality and the Public Sphere*, Oslo, Norway, 27-29 September 2012

More than half of these symposia and workshops have resulted / are resulting either in peer-reviewed anthologies published with international academic publishers or a special issue in an international peer-reviewed journal.
Overview of NIES’s research coordination and output (2)

Book and special issue publications resulting from NIES symposia to date include:

- *The Anti-Landscape*, eds. Elkind and Nye, Studies in Environmental Humanities (SEH) series, Rodopi (Amsterdam/New York), 2013
- *Environmentalism, Spatiality and the Public Sphere*, eds. Bergmann and Luccarelli, to be submitted for review to the SEH series, Rodopi, in fall 2013.
Overview of NIES’s research coordination and output (3)

NIES-organized research symposia and open scholarly workshops scheduled to take place in 2013-2014 include:

- **IEM coordinated planning workshop 3**, KTH, Uppsala University & University of Aberdeen, Sweden & Scotland, 4-9 February 2013
- **IEM coordinated planning workshop 4**, Arni Magnusson Institute for Icelandic Studies, FSI (i.e. the Institute of Archaeology, Iceland), and Reykjavik Academy, Reykjavik, Iceland, 24-26 April 2013
- **Inscribing Environmental Memory coordinated sessions and workshops (IEM workshop 5)**, Akureyri, Iceland, 10-16 July 2013 (including
  1) Integrating the Environmental Sciences & Humanities, NIES/NABO/GHEA IEM workshop at Thelamork school, Akureyri, 10-11 July; 2) integrated session in the NABO General Meeting, University of Akureyri, 12-13 July; and 3) Intensive IEM Working Group Meetings, 15-16 July, Akureyri)
- **European Cooperation in the Environmental Humanities (ECEH) workshop 2**, co-organized by NIES, the Rachel Carson Center in Munich, and KTH Environmental Humanities Laboratory in Stockholm (financed by the latter), 3-4 September, Stockholm, Sweden.
- **NIES VIII research symposium**: Landscape, Environment, Emotion, University of Turku, Pori, Finland, 25-27 September 2013
- **European Cooperation in the Environmental Humanities (ECEH) workshop 3**, co-organized by NIES, the KTH Environmental Humanities Laboratory in Stockholm and Rachel Carson Center in Munich (financed by the latter), March 2013 (exact dates TBA), Munich, Germany
- **NIES IX research conference**: Framing Nature: Signs, Stories and Ecologies of Meaning (co-organized with EASLCE), Tartu, Estonia 22-26 April 2014
- **NIES X research symposium**: Environmental Consciousness & Modern Culture, Sundsvall, Sweden October 2014 (exact dates TBA)

Each of the three research symposia listed above are expected to result in peer-reviewed anthologies published with international academic publishers.

Combined presentation of NIES & IEM -- July 2013
The European Association for the Study of Literature, Culture, and the Environment (EASLCE) biennial conference
Nordic Network for Interdisciplinary Environmental Studies (NIES) IX conference

Hosted by the Department of Semiotics at the University of Tartu in cooperation with the Department of Literature and Theatre Research at the University of Tartu and Estonian Semiotics Association, and the and the Centre for Environmental History (KAJAK)


Combined presentation of NIES & IEM -- July 2013
Perhaps NIES’s signature event was the combined research symposium (NIES V) and researcher training course devoted to defining and strengthening the Environmental Humanities as an emerging research field.

The program for this meeting serves as a good model of how the network’s symposia are typically organized.
What discourses and research fields do the Environmental Humanities bring together?
NIES’s research symposia and book projects have included contributions from researchers in the following academic disciplines / subjects / fields (some of them already interdisciplinary) — the list is hardly exhaustive

- Ecocriticism / Literature and Environment
- Environmental History
- Science & Technology Studies
- Landscape Studies
- Cultural and Environmental Anthropology
- Media and Communication Studies
- Environmental Archaeology
- Urban Studies
- Gender Studies
- Human Geography
- Ecolinguistics
- Historical Ecology & Historical Climatology
- Philosophy (particularly environmental ethics and aesthetics)
- Religion & the Environment
- Landscape Architecture
- Tourism Studies
- Regional and Rural Studies
- Art History
- Environment and Development Studies
- Education for Sustainability
- Integrated Environmental and Digital Humanities
- Ecosemiotics

Combined presentation of NIES & IEM -- July 2013
New NIES Initiatives

NIES’s latest initiatives are helping to break new ground in the emergent field of the Environmental Humanities
NIES-organized initiatives

- SEH (Studies in Environmental Humanities)
- *Bifrost* Research-Media Arts Educational Outreach
- ECEH (European Cooperation on the Environmental Humanities)
- IEM (Inscribing Environmental Memory in the Iceland Sagas)
New NIES Initiative 1
Publication Series

Studies in Environmental Humanities

The series comes online in 2013 with the volume *The Anti-Landscape*, and three new volumes to follow in 2014.

http://www.rodopi.nl/senj.asp?SerieId=SEH

Combined presentation of NIES & IEM -- July 2013
NIES Initiative 2

*Bifrost* Research-Media Arts Outreach Project (1)

• The *Bifrost* project seeks to

  – make the insights and contributions from environmental studies (scientific, humanistic and social science domains, including policy fields) more accessible to the general public;

  – encourage greater participation among non-academics in vital discussions arising from scholarship, scientific research and policy work and the enhanced understandings of entangled natural and cultural issues (i.e., environmental issues in the fullest sense) by integrating arts and media professionals as valuable partners in this important work.

• The project is developing innovative ways of communicating with the general public about the environment, bringing specialized knowledge and understandings of complex questions into various public arenas, especially:

  – Universities
  – Museums
  – other venues in which the public, knowledge and policy workers, and academics (both senior researchers and students) can experience the work, such as:

    • culture/art centers
    • policy forums and political arenas
    • schools
    • youth congresses
    • multidisciplinary academic conferences

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Bifrost (2)
(Norrman, Birgersson & Hartman)
Sigtuna, Sweden October 2011

Combined presentation of NIES & IEM -- July 2013
Bifrost (3)
(Norrman, Birgersson & Hartman)

Uppsala, Sweden May 2012

Combined presentation of NIES & IEM -- July 2013
NIES Initiative 2

*Bifrost* Research-Media Arts Outreach Project (2)

- The *Bifrost* project is a collaboration of:
  - The Nordic Network for Interdisciplinary Environmental Studies
  - Zoopeople Media Collective, Stockholm
  - HUMlab, Umeå University
  - The Humanities Division, Mid Sweden University

- The project has also received valuable sponsorship support from:
  - Sigtuna Foundation
  - The Human Ecodynamics Research Center of the City University of New York
  - The Global Human Ecodynamics Alliance
  - The Svartárkot Project, Iceland
  - The Center for Sustainable Development, Uppsala University
Bifrost (4)
(Norrman, Birgersson & Hartman)
Höfn, Iceland, May 2012

Combined presentation of NIES & IEM -- July 2013
Bifrost (5)

(Norrman, Birgersson & Hartman)

Sigtuna, Sweden October 2011

Combined presentation of NIES & IEM -- July 2013
Bifrost (6)
(Norrman, Birgersson & Hartman)
Sigtuna, Sweden October 2011
The pilot documentary in this series, titled “Developing the Environmental Humanities” (41 min) can be viewed online in a single-channel virtual representation of the three-screen spatial format; see the following link:

http://vimeo.com/38246572

The first two documentary installations in the series have exhibited in Sigtuna (Nov. 2011), Uppsala (May 2012), Höfn, Iceland (May 2012) and Barbuda (January 2013).

Single-channel screenings of the first documentary (“Developing the Environmental Humanities”) have been publicly exhibited in Reykjavik (May 2012), Oslo (Sept. 2012) and New York (Oct 2012).

In spring 2013 the digital humanities center HUMlab at Umeå University joined NIES as a coordinating and creative partner in the Bifrost project.
Scanpix installation (8)
(Norrman and Birgersson)

A 44 meter by 4 meter film, using 8 projected video channels. Shown at the Fotografiska Museum in Stockholm, November 2012
Scanpix installation (9)

(Norrman and Birgersson)

Fotografiska Museum, Stockholm, November 2012

Combined presentation of NIES & IEM -- July 2013
NIES Initiative 3

Coordinated efforts to initiate a
European Cooperation on the Environmental Humanities (1)

• In 2011 in conjunction with the research symposia in Odense (NIES IV) and Sigtuna (NIES V) the network began active cooperation with leading humanities-focused environmental studies associations in Europe to foster theoretical advancement in interdisciplinary humanistic environmental studies and to promote increased cooperation among key actors/organizations in Europe that could help to build capacity in the field, including:
  – European Association for the Study of Literature, Culture and Environment (EASLCE)
  – Association for the Study of Literature and Environment—UK & Ireland (ASLE-UKI)
  – European Forum on Religion and Environment

• In 2012 some leading and emerging European centers promoting / carrying out interdisciplinary Environmental research with salient humanities dimensions were engaged in these efforts, including the following institutions:
  – The Rachel Carson Center
    • Also the European Society of Environmental History (ESEH) via Christof Mauch’s leadership role in both organizations
  – KTH Environmental Humanities Laboratory
  – Danish Institute for Advanced Study, University of Southern Denmark
  – SUM (Centre for Development and the Environment), University of Oslo
  – CEMUS/Center for Sustainable Development (CSD Uppsala), Uppsala University

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European Cooperation on the Environmental Humanities (2)

- A meeting of nearly all these partners took place in September 2012 at a one-day workshop arranged in conjunction with the research symposium in Oslo (NIES VII).
  - a plan for further cooperation was agreed upon, involving follow-up work and concrete outcomes in 2013 and beyond, enabled via workshops co-organized by NIES, the KTH Environmental Humanities Laboratory in Stockholm and the Rachel Carson Center in Munich
    - Workshop on Coordinated European Cooperation, Rachel Carson Center, Munich, Germany, 27-28 June 2013
    - Workshop on Coordinated European Cooperation, KTH, 3-4 September
    - Workshop on Coordinated European Cooperation, Rachel Carson Center, Munich, Germany, March 2013

- A key meeting took place in Munich on 27-28 June, organized by the Rachel Carson Center, in preparation for the Stockholm and Vilnius meetings in September 2013.
  - Participating institutions/organizations included:
    - NIES
    - KTH Environmental Humanities Laboratory, Stockholm
    - Rachel Carson Center, LMU-Munich
    - Center for Humanities, University of Utrecht
    - Humanities Long Room Hub, University of Dublin
    - Ecocriticism Hub, Bath-Spa University
    - European Consortium for Humanities Institutes and Centres (ECHIC)
  - Also on the agenda were:
    - preparations of a COST application in support of strengthening European cooperation Environmental Humanities
    - Exploration of prerequisites and formal steps required to create an official body, provisionally described as a scientific advisory council on European Environmental Humanities, to work to build capacity within Europe in this research area
    - Positive steps forward were made in each of the areas of action ion the agenda for this meeting, to be followed up and formalized at the planned meetings in September 2013

Combined presentation of NIES & IEM -- July 2013
Research clusters within NIES, NABO (the North Atlantic Biocultural Organization) and GHEA (the Global Human Ecodynamics Alliance), in cooperation with partner networks in the USA, the UK and the Nordic countries, have undertaken a major interdisciplinary research initiative that aims to examine environmental memory in the medieval Icelandic sagas, with a prominent focus on historical processes of environmental change and adaptation. The medieval *Sagas of Icelanders* constitute one key corpus, among other literary and documentary corpora, to be investigated in this initiative.

Anchored in traditional fields of study (e.g. saga studies and various medieval-studies fields) as well as newer and emerging fields (e.g. integrated history and historical ecology, ecocriticism, digital and environmental humanities, etc.), the initiative brings together literary scholars, anthropologists, archaeologists, historians, geographers, digital humanities specialists and environmental and life scientists in a coordinated set of sub-projects.

IEM is an official case study of IHOPE (The Integrated History and future of People on Earth). IHOPE is led by the international project AIMES (Analysis, Integration and Modeling of the Earth System), a core project of the International Geosphere-Biosphere Programme. IHOPE is co-sponsored by PAGES (Past Global Changes) and IHDP (The International Human Dimensions Programme on Global Environmental Change).
IEM

With a solid grounding in the environmental humanities and social sciences the IEM initiative examines environmental representation in the Icelandic sagas alongside environmental markers in a variety of other documentary sources, in addition to material-cultural and palaeoenvironmental data.

The initiative seeks to foreground evidence of changing environmental conditions in Iceland, Greenland and Scandinavia from the late Iron Age through the pre-Industrial period, with a guiding focus on long-term human ecodynamics and the relations among ecological change and adaptation, on the one hand, and resource management, social organization/conflict and resilience on the other.
The “theta fragment” is the oldest fragment from a Family saga, mid 13th c.

Image courtesy of Jóhanna Ólafsdóttir, Árni Magnússon Institute for Icelandic Studies
The primary goal of the project is to consider evidence regarding environmental conditions and changes during the period ca. AD 850 - 1500. The information gathered will be related to how the environment was memorialized in the *Sagas of Icelanders*.

The sagas were committed to writing in the forms now largely preserved for posterity in the 13th through 15th centuries. The initiative considers how environmental and societal conditions during this time period—including processes of environmental change—may have shaped an understanding of the past, including cultural foundation narratives and environmental lore.
The District Center farm of Skútustaðir in Northern Iceland
The Icelandic sagas are being examined alongside other textual sources and data sets that pertain to the period AD 850-1500. This time frame approximately covers the height and subsequent decline of Scandinavian sea-faring, migration and society building in the North Atlantic as inscribed in saga literature representing the Viking Age/Late Iron Age through the late medieval period.

The period AD 850-1500 encompasses: the first large-scale human settlement and inhabitation of Iceland; major changes to landscape, environment and climate; various cycles of social turbulence and relative stability; the emergence of a particularly rich body of medieval narrative literature focused in large measure on the history, communities and environments of Icelanders, Greenlanders and other Norse and Celtic derived societies in the North Atlantic over the course of several hundred years.
This time frame AD 850-1500 also happens to cover an extremely interesting period with regard to climatic and environmental changes.

The initiative will examine historical sources that contain evidence regarding these changes, while also drawing on climate proxy data (already analyzed) in order to examine the relevance of terms such as the so-called “Medieval Climatic Optimum” and the “Little Ice Age”.

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Landnáma map (Eyjafjord)

Hand-drawn map showing locations of settlement era chiefly power centers as derived from the Sagas centered upon Eyjafjord

Image courtesy of Gisli Sigurdsson, Árni Magnússon Institute for Icelandic Studies
GIS output locating ruins and routeways in parts of Eyjafjord based upon GPS location provided by the ISLEIF archaeological database organized and maintained by FSI.

(GIS courtesy of Kenneth Mack, CUNY)

Maps have become increasingly useful tools for displaying diverse data sets and promoting the cross-disciplinary recognition of patterns in social and environmental factors that play out in both space and time.

While hand drawn maps remain powerful tools for visualization, their power increases exponentially with the application of GIS technology backed by highly detailed spatially-referenced data sets (archaeology, place names, historical route ways, past human and animal censuses, shifting power centers, areas of different vulnerability to climate change on different scales, etc.).

As another way of inscribing environment and environmental memory, maps have tremendous potential as points of cross-disciplinary interface (even as a kind of methodological lingua franca), enabling greater and greater creative overlaying and stimulation of interdisciplinary conversation and understanding.
IEM development work

In response to a call for preliminary abstracts, 28 IEM sub-project proposals were submitted in fall 2012. Not all of the sub-projects proposed will be part of the final IEM program; many will be consolidated into a more manageable number of sub-project nodes and some may not move forward as prioritized focuses of the IEM initiative in the immediate future. We anticipate this will largely be a process of self-selection.

Numerous IEM workshops organized by NIES, NABO and various university partners are taking place in 2013. IEM project development work in 2013 is expected to culminate in several major bids for research funding to be submitted to research financing agencies in various national and international contexts between fall 2013 and summer 2014.
Proposed sub-project focuses (1)

1) Icelandic Family Saga – corpus-analysis and other text mining of environmental elements / markers + mapping the saga cycle
2) Identifying environmental information in medieval texts – the problem of symbolism
3) Environmental Memory in the Contemporary Sagas
4) Cultural Context of Saga Writing
5) The facilities of maritime communication in an Icelandic perspective
6) The Environmental Context and Use of Shielings in Viking Age and Medieval Iceland
7) Geodata enabled research infrastructure for the IEM project
8) NABO Project Management System
9) Whales, Archaeology, Ancient DNA, and Icelandic History and Literature
10) Landscape in the Sagas of Icelanders
11) Landscape and Plot in the Icelandic Family Sagas
12) Modeling the Sagas: Models, Rules, and Past Social-Environmental Systems
13) Environmental Change, Traditional Ecological Knowledge, and Memory
14) Eyjafjord through time: archaeological, environmental, and documentary perspectives

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Proposed sub-project focuses (2)

15) Resources and Memory: Comparing Wild Resource Use in Sagas, Law Codes, and Archaeology
16) Woodland clearance in Iceland and the sagas
17) Enclosures and open range grazing in the Commonwealth Period in Iceland
18) Movement and memory in the saga landscape
19) Imagining Greenland & the Wider World: Sagas and Archaeology
20) Dynamics and pressure in the North – Early Medieval economies, cross regional interaction and resource use in Scandinavia
21) Death and Burial in PreChristian Iceland – Archaeology and Saga Memory
22) Landscape conditions and change from the Landnam through the end of the Free State (874-1262) as impacted by settlement and farming practices
23) Geo-temporal mapping of feuds as depicted in the family sagas
24) Agriculture and environment in the 12th to 15th centuries in contemporary sources
25) Environmental history survey of archeological/interdisciplinary projects concerning medieval Iceland
26) Sub-project placeholder – Saga Studies-specific problem formulation
27) Resource colonies and environments in a changing North Atlantic
28) Sub-project placeholder for a focus on volcanic impacts on Icelandic environments from the late Iron Age through the late medieval period
Development of the IEM initiative

Numerous IEM workshops organized by NIES, NABO, GHEA and various university partners are taking place in 2013 in Sweden, Scotland and Iceland.

IEM project development work in 2013 is expected to culminate in several major bids for research funding to be submitted to research financing agencies in various national and international contexts between fall 2013 and summer 2014.
IEM development work in 2013 (2)

- Numerous IEM workshops organized by NIES, NABO, GHEA and various university partners are taking place in 2013:
  - **8-9 February, University of Aberdeen**
    - For more information contact Karen Milek: k.milek@abdn.ac.uk.
  - **24 April, Árni Magnússon Institute for Icelandic Studies**, meeting of project coordinators, advisors and Icelandic anchoring institutions
    - For more information contact Steven Hartman: hartman@kth.se.
  - **26 April, Reykjavik Academy**, open workshop for prospective IEM researchers based in Iceland
    - For more information see the IEM website (expected to be operational after mid-April, http://www.nabohome.org/iem) or contact Vidar Hreinsson: vidar@akademia.is.
  - **10-16 July**, dedicated planning meetings and open sessions are to take place in conjunction with the NABO 2013 General Meeting (12-13 July) hosted by **University of Akureyri and the Stefansson Arctic Center**
    - For more information see the NABO website (http://www.nabohome.org/meetings/Akureyri2013/) or contact Tom McGovern: thomas.h.mcgovern@gmail.com.
  - **December**, workshop to take place in Sweden (exact dates and location to be announced, likely **Stockholm or Uppsala** in the first half of December) with 3 proposed focuses: 1) Resource exploitation in the Nordic circumpolar zone: contested commons in the *longue durée*; 2) Coordinating theoretical approaches and methods for engaging data concerning environment in the Eyjafjörður and Þingeyjarsýsla regions through mapping relevant sagas and other documentary sources; and 3) Custom development of integrative digital tools and platforms as cross-cutting resources within IEM.
    - This last meeting may involve a large number of IEM core participants from the Nordic countries, the UK and the USA if planned seed funding efforts are successful; if these funds are not obtained, a smaller workshop will take place anyway, though perhaps involving largely Swedish and some other Nordic-based IEM participants.

For more information consult the IEM website in September: http://www.nabohome.org/iem

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Planning efforts in 2013 aim to realize the following goals:

- strengthen the saga-studies and Viking age/medieval historical studies dimensions of the initiative

- refined framing of the initiative through application of specific theoretical approaches from ecocriticism, environmental history and other relevant fields

- optimization of the initiative’s advisory, governance and project management structures, establishing relevant boards and cross-cutting organs to achieve greater cohesion within the initiative

- prioritization and consolidation of proposed sub-projects

- identification and implementation of prioritized pilot work

- preparation of major funding bids for longer-term support of the initiative

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IEM development (4)

Pilot work within selected sub-projects will be initiated in 2013 capable of developing tools, platforms, approaches and preliminary results on which other sub-projects may subsequently build. Prioritized pilot work will include:

– Custom development of digital humanities tools (GIS, data mining, topic modeling, integrated textual and archaeological mapping and geovisualization techniques) that can be brought on line as cross-cutting resources to service the wider spectrum of subprojects implemented in the following phases of the IEM project work

– Refinement of the ‘mapping’ approach to saga analysis and interdisciplinary data interface, though regional geographical pilot study focusing on Eyjafjörður and Þingeyjarsýsla and textual sources pertaining to these regions.

– Comparative examination of cases of resource exploitation in the Nordic circumpolar zone: contested commons in the *longue durée* — investigating the phenomenon of resource colonization in selected complementary cases from Scandinavia through the North Atlantic and Baltic regions on a millennial scale.
IEM Management and Governance

Our proposed governance structure combines a distinguished Scientific Advisory Board representing recognized leaders in the participating fields of study with a Steering Committee (still in the process of being formed) responsible for project and grant administration tasks.

The IEM management structure combines a series of sub-projects proposed and carried out by participating scholars (typically in multidisciplinary teams) with a set of four supporting working groups intended to provide advisory and other cross-cutting resources to the sub-projects, ensuring coherence and optimal communications among sub-projects as well as common standards and shared best practice.

The proposed working groups are not being considered as control mechanisms but as resource nodes that can serve multiple sub-projects. Typically sub-projects will be linked to more than one of these four nodes / working groups.
IEM Management and Governance (2)

IEM Scientific Advisory Board

- Stefan Brink (Scandinavian languages, landscape history and medieval studies, Univ. of Aberdeen)
- Lawrence Buell (environmental literary criticism, Harvard University)
- Jon Christensen (environmental history / digital humanities, UCLA)
- Jago Cooper (archaeology, the British Museum)
- Carole Crumley (anthropology / integrated history and historical ecology, SLU)
- Arni Einarsson (biology / ecology, University of Iceland)
- Kirsten Hastrup (anthropology, University of Copenhagen)
- Guðrun Nordal (literary saga studies, The Arni Magnusson Institute, Iceland)
- Gisli Palsson (anthropology, University of Iceland)
- Richard Oram (medieval and environmental history, University of Stirling)
- Neil Price (archaeology, University of Aberdeen)
- Jon Vidar Sigurdursson (history, University of Oslo)
- Ian Simpson (environmental geography, University of Stirling)
- Paul Sinclair (archaeology, Uppsala University)
- Guðrún Sveinbjarnardóttir (archaeology, University College, London)
- Sverker Sörlin (environmental history, KTH Royal Institute of Technology, Stockholm)
- Orri Vésteinsson (archaeology, Institute of Archaeology, Iceland, and University of Iceland)

The Scientific Advisory Board is to be consulted on key strategic questions throughout the research program’s life. Selected members of the board will be consulted, as needed, when specific questions arise requiring reference to their respective areas of expertise. As the IEM initiative comes more fully online, milestone meetings of the advisory group will be organized once a year throughout IEM phases of activity to meet quality-assurance and reference needs.
IEM Management and Governance (3)

The IEM initiative is steered by an international executive committee.

IEM Executive Committee
Steven Hartman (coordinator for NIES), Mid Sweden University, Sweden
Thomas McGovern (coordinator for NABO & GHEA), CUNY, USA
Andrew Dugmore, University of Edinburgh, UK
Adolf Friðrikson, FSI, Iceland
Viðar Hreinsson, Reykjavik Academy, Iceland
John Ljungkvist, Uppsala University, Sweden
Karen Milek, University of Aberdeen, UK
Astrid Ogilvie, Tromsø University, Norway
Gísli Sigurðsson, Arni Magnusson Institute, Iceland
IEM Management and Governance (4)

The four proposed supporting groups will include:

– **Digital Resources**: GIS integration, human and environmental models, data management and accessibility, data (including digital text) mining and mapping, topic modeling, geotemporal visualization and digital dissemination

– **Textual Analysis via Ecocriticism and Environmental History**: coordinating the literary and historical (e.g. saga, legal, placename and folklore) analyses with focused ecocritical close readings of the sagas, working to optimize searches for environmental elements in documentary sources and to map as comprehensively as possible environmental content/representation in the literary sources, balancing quantitative with qualitative analyses.

– **Historical Ecology, Historical Climatology and Comparative Human Ecodynamics**: coordinating field and laboratory archaeology (including bioarchaeology, zooarchaeology, archaeobotany, geoarchaeology, geophysics).

– **Integrated Science and Humanistic Study**: coordinating integration of project activities and findings with the wider Sustainability Science & Education communities (including affiliated international projects such as IGBP, AIMES PAGES and IHDP), seeking to engage with the new Future Earth program, its sponsoring organizations and the scientific programs it is integrating (ISSC, ICSU, UNEP, UNESCO and UNU).
Institutional affiliations of participating researchers in the IEM initiative

The IEM initiative is anchored by a number of research environments, including the following partner institutions:

**SWEDEN & NORWAY**
- Mid Sweden University
- Royal Institute of Technology (KTH)
- SLU — The Swedish University of Agricultural Sciences
- Umeå University
- Uppsala University
- University of Oslo

**ICELAND & DENMARK**
- The Árni Magnússon Institute for Icelandic Studies
- FSI — The Institute of Archaeology, Iceland
- Reykjavik Academy
- University of Iceland
- Stefansson Arctic Institute
- National Museum of Denmark
- University of Copenhagen

**UNITED KINGDOM**
- British Museum
- University of Aberdeen
- University of Durham
- University of Edinburgh
- University of Stirling

**USA & CANADA**
- City University of New York
- UCLA
- University of California, Berkeley
- Université Laval
- University of Maryland

Researchers from the fields of environmental literary studies, environmental history, ecolinguistics, environmental anthropology/archaeology, geography, Scandinavian and Old Norse historical/literary/linguistic studies, digital humanities, ecology and various fields of the environmental sciences are involved in the IEM initiative and are working together in multidisciplinary teams.
Digital Humanities & GIS Tools

Data mining, topic modeling and text mapping, as well as GIS & online map-based databases + contributing institutions

— Arni Magnusson Institute & FSI (Institute of Archaeology, Iceland)
  
  AMI: [http://www.arnastofnun.is/page/as2012_forsida_en](http://www.arnastofnun.is/page/as2012_forsida_en)
  
  FSI (INSTARCH): [http://www.instarch.is/instarch/English/](http://www.instarch.is/instarch/English/)

  Isleif archaeological database

— University of Edinburgh

  NABO Project management system: [http://www.nabohome.org/cgi_bin/projects.pl](http://www.nabohome.org/cgi_bin/projects.pl)

— UCLA

  Digital text-analysis tools and approaches developed through cooperation of Digital Humanities and Environmental Humanities research environments

— Umeå University and Mid Sweden University (in cooperation with Univ. of Edinburgh, CUNY & FSI):

  Applied Corpus Analysis / Text Mining

  e.g. Textometrica: [http://www.youtube.com/watch?v=2XTZ602W55E](http://www.youtube.com/watch?v=2XTZ602W55E) & [http://textometrica.humlab.umu.se](http://textometrica.humlab.umu.se)

  Dynamic platform for integrating geovisualization tools/products and text visualization outcomes

  SEAD (The Strategic Environmental Archaeology Database): [http://www.sead.se](http://www.sead.se)

Combined presentation of NIES & IEM -- July 2013
In April 2013 IEM became an official case study of IHOPE (The Integrated History and future of People on Earth). Led by the international project AIMES (Analysis, Integration and Modelling of the Earth System), a core project of the International Geosphere-Biosphere Programme, IHOPE is co-sponsored by PAGES (Past Global Changes) and IHDP (The International Human Dimensions Programme on Global Environmental Change). Soon IGBP, IHDP and other global programs will be further amalgamated within the new Future Earth framework.

IHOPE asserts that humans are a part of the Earth system and are now agents in planetary change. To offer viable paths for humanity’s future, our models, scenarios, and other visions must incorporate the full range of human experience and creativity by drawing on experiments in the laboratory of the past. IHOPE is unique in its focus on how the human past can offer important knowledge on which to build an equitable future for our species and in its integration of perspectives, theories, tools, and knowledge from the social and biophysical sciences, the humanities, and various communities of practice.