Collaborative LTER Research in the Baltic Region

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University of Georgia
USA
East Asia Pacific Regional LTER Network
- Australia
- China
- China-Taipei
- Mongolia
- South Korea
North American Regional LTER Network
- Canada
- Mexico
- United States
Central/Eastern European Regional LTER Network
- Austria
- Czech Republic
- Hungary
- Latvia
- Poland
- Slovak Republic
- Ukraine
African Regional LTER Network
- Mozambique
- Namibia
- South Africa
- Zambia
Middle East Regional LTER Network
- Israel
Western European Regional LTER Network
- France
- Switzerland
- United Kingdom
Central/South American Regional LTER Network
- Brazil
- Colombia
- Costa Rica
- Uruguay
- Venezuela

The International Long Term Ecological Research Network

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<th>Official LTER Networks</th>
<th>Countries Considering LTER Networks</th>
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Updated August 04
ILTER Organization

• **ILTER Chairperson:** Hen-biau King (Taiwan)

• **ILTER Executive Committee**
  - Western Europe - Christian Leveque (France)
  - Central/Eastern Europe - Julius Oszlanyi (Slovakia)
  - North America - Manuel Maass (Mexico)
  - Central/South America - Jorge Jimenez (Costa Rica)
  - East Asia/Pacific - Zhao Shidong (China)
  - Southern Africa (ELTOSA) - Johan Pauw (S. Africa)

• **ILTER Coordinating Committee**
  Consists of one voting person from each ILTER member network

• **ILTER Support**
  Short-term support for a coordinator to insure success during transition - John VandeCastle (USA)
Baltic Regional Network

- Countries represented at this meeting:
  - Belarus
  - Estonia
  - Finland
  - Latvia
  - Lithuania
  - Poland
  - Russia
  - Sweden
  - Ukraine

- Other potential collaborators for future research:
  - Denmark
  - Germany
  - Additional Russian Collaborators
Long-term research is necessary to reveal:

- Slow or transient processes
- Episodic or infrequent events
- Trends
- Multi-factor responses
- Processes with major time lags
THE IMPORTANCE OF CROSS-SITE SYNTHESIS

“The power of the network approach of the LTER program rests in the ability to compare similar processes (e.g., primary production or decomposition of organic matter) under different ecological conditions. As a result, LTER scientists should be able to understand how fundamental ecological processes operate at different rates and in different ways under different environmental conditions” (Risser Report, 1993).
Information Management

Potential Database Product for the Baltic Network

Baltic Network Species Database:
1) select an organism such as birds or fish
2) compile species lists that are already in existence
3) note red book species
4) generate hypotheses that can be answered by “mining” these databases
5) could be conducted by a graduate student who follows up with the participants from this meeting
Potential Baltic Network Research Themes

1) Biodiversity Indicators
2) Bird Population Studies
   links with climate change
3) Fish Population Studies
   links with climate change
4) Land Use Change Utilizing Satellite Imagery
Coweeta LTER Land Use Change
Successful Research Projects from the CEE Regional Network

- **Detritus Input and Removal Treatments (DIRT)**
- Study started in 1957 at the University of Wisconsin Arboretum (Nielsen and Hole 1963)
- DIRT research sites were established at the Andrews and Harvard Forest LTER sites (US)
- Sikfokut DIRT site established in Hungary in 2000 with funding from Hungary and US-NSF
Successful Research Projects from the CEE Regional Network

Siemianice Site in Poland

“Linking Leaf and Root Traits to Ecosystem Structure and Function in a Common Garden Study of 14 Temperate Tree Species”

• **Start Date** June 1, 2002
• **End Date** May 31, 2005 (Estimated)
• **NSF Award #0128958**: $630,804 US
• **Investigators**: Jacek Oleksyn and Peter Reich
LTER Information on the Web

ILTER Network
www.ilternet.edu

US LTER Network
www.lternet.edu

Coweeta LTER Site
coweeta.ecology.uga.edu