“The Baltic Green Belt”: military heritage and the environment: To preserve or to destroy?

Kalev Sepp
Estonian University of Life Sciences

Used: Stefanie Maack, Wolfgang Günther, Horst Sterr, Boris Erg, Kaj Frobel, Liana Geidezis
Outline

- Estonian University of Life Sciences
- From the Iron Curtain to European Green Belt
- Green Belt Europe
- Baltic Green Belt Project
- The Estonian Green Belt—green and brown heritage
- Military heritage in Estonia - to preserve or to destroy?
- Film „The Estonian Green Belt“
The Iron Curtain

- Originally the word for the fireproof curtain in a theatre, in 1946 Winston Churchill coined the phrase “Iron Curtain” for this new barrier between the two political and military systems in his famous "Sinews of Peace" speech in Missouri.

- The Iron Curtain became an almost impermeable physical barrier: metal fences, walls, bunkers, barbed wire, guard towers, spring guns, land mines and watch dogs created a death zone between countries that separated families for decades and caused death or injuries to hundreds of people trying to cross the border.
The Core area of the Green Belt Germany is the former “no mans land”, the upstream territory of the GDR lying west to the metal fence. Here, habitats could develop nearly undisturbed for decades.
... collapse of the Iron Curtain in 1989
The Pan-European Picnic

- **In 1989**, the border between Hungary and neutral Austria became the first part of the Iron Curtain to be dismantled: On 19 August 1989, a meeting (Pan-European Picnic) was organized near Sopron.

- The Pan-European Picnic was an important event during the revolution of 1989 and led to the fall of the Iron Curtain.
Green Belt Europe – beginning of the Initiative

- 1989: BUND initiates the **Green Belt Germany**
- Early 1990ies: Activities for a **Fennoscandian Green Belt** and **Balkan Green Belt**
- 2002: First idea of a “Green Belt Europe”
- 2003: Conference “Perspectives of the Green Belt” in Bonn (Germany) organised by BfN
- 2004: First **Pan-European Green Belt Conference** “Connecting Europe’s Biodiversity” in national park Fertö-Hansag (Hungary) organised by IUCN and BfN

**Common structure of the initiative**

**Programme of Work (PoW)**
Nature developed and became visible

- The Iron Curtain encouraged the conservation and development of valuable habitats and thus served as a retreat for many endangered species.
- The richness of these natural habitats was obvious long before the Iron Curtain fell.
- Already years earlier, conservationists throughout Europe had turned their attention to the flourishing nature and wildlife that had proliferated undisturbed.
Nature developed and became visible

- In 1970, satellite pictures showed a dark green belt of old-growth forest along the Finnish-Russian border. Cooperation between Finland and the Soviet Union in the area of nature conservation was begun in the 1970s with the signing of a scientific-technical cooperation agreement. The term “Fennoscandian Green Belt” was first used in 1992.

- In 1975, the first observations of the inner-German border areas were made, though at the time these were possible only from the western side. A systematic ornithological survey, conducted in 1979 along a 140-kilometre stretch of the border by young conservationists from BUND (Friends of the Earth Germany), showed a richness of biodiversity. In 1989, BUND launched the Green Belt Germany project.
German Green Belt

- The idea of a Green Belt was first introduced in 1989 at the German non-governmental organization BUND seminar,

- The idea of a green corridor was formulated - to create a network of protected areas winding through the whole Germany along former Iron Curtain
Launch of the Green Belt Initiative

- September 2004, Sarrod / Fertő-Hansag National Park, Hungary
- More than 70 participants, 17 countries, European institutions, e.g. EU, UNEP, UNESCO, national and regional NGOs...
- Results: Vision, Programme of Work, Structure...
Green Belt Europe

Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.
Vision of the European Green Belt

“Creating the backbone of an ecological network running from the Barents to the Black Sea that is a global symbol for trans-boundary cooperation in nature conservation and sustainable development”
Programme of Work: Objectives

1. The establishment of a functional ecological network;
2. The implementation of a knowledge sharing mechanism on transboundary cooperation;
3. Development of a tool for sustainable development;
4. Establishment of an ecological laboratory;
5. Establishment of the Green Belt as a brand for products and activities.

www.europeangreenbelt.org
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.

Green Belt Europe: cross-section of biogeographical and climatic regions of Europe

Important migration corridor (South – North) concerning climate change
Green Belt Europe - Initiative
Geopolitical and Cultural Relevancies

- Connection of - 15 EU-member states (yellow)
- 3 candidate countries (dark grey)
- 4 potential candidate countries and - non-EU-countries (Russia, Norway)
- Unique Chance for: Trans-boundary exchange and cooperation in nature conservation, regional development and nature tourism Development of an European civil society, preserving the common cultural heritage
The overall steering is done by a **Coordination Group** with members from all regions:

- **4 Regional Coordinators** (Fennoscandia, Baltic Region, Central Europe, Balkans)
- **4 National Focal Points** (one representing each region)
- **4 Non-Governmental Organizations (NGOs)** (one from each region)
- **IUCN, International Union for Conservation of Nature**
- **Current chair: EuroNatur, Regional Coordinator Balkan Green Belt**
Regional Activities: Workshops for the Implementation of the Green Belt

Central European Green Belt:
October 2005, Mitwitz, Bavaria

South Eastern European Green Belt:
November 2005, Novi Sad, Serbia;
October 2008, Blagoevgrad, Bulgaria

Pan-European Green Belt Meeting:
November 2007, Stupava, Slovakia

Fennoscandian & Baltic Green Belt:
September 2006, Lahemaa, Estonia
Experience Green Belt

The Green Belt as a chance for sensitive tourism and sustainable development...
Reisepavillon Munich 2009
International Fair for Alternative
Special editions

NATUR UND LANDSCHAFT
Zeitschrift für Naturschutz und Landschaftspflege
9/10 September/Oktober 2009
84. Jahrgang

Schwerpunkt:
Das Grüne Band
20 Jahre nach dem Fall des Eisernen Vorhangs

Verlag W. Kohlhammer

Nationalpark
Wildnis · Mensch · Landschaft

Erfolgsgeschichte Grünes Band

Verlag W. Kohlhammer
Public Relation
TV-Productions

Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.
Exhibition “The European Green Belt Borders.Wilderness.Future” Linz 09
A vision – an object of the UNESCO World Heritage Site?

- Since the fall of the Iron Curtain, old and emerging ideologies, symbols and landscapes have been under continued reinvention and reinterpretation along the so called European Green Belt (EGB).

- Its cultural and natural heritage have been considered repeatedly as having outstanding universal value (OUV) as in the case of UNESCO World Heritage designated sites.

- The question on the feasibility of designating the EGB by its OUV under the UNESCO World Heritage Site label remains open.
A vision – an object of the UNESCO World Heritage Site?

- **Scenario A** - “Relict Cold War frontline landscape representing an outstanding example of habitat connectivity across Europe”: The former Iron Curtain is the most complex and developed of all relict Cold War frontline landscapes which has evolved into a globally significant network of habitats that is essential for the long term conservation of Europe's unique ecosystems and biological diversity.

- **Scenario B** - “Associative manifestation landscape of the former Iron Curtain and its overcoming”: The “European Green Belt” is the associative manifestation of the former Iron Curtain and the Cold War’s overcoming. Its associative manifestation becomes tangible through the Cold War's frontline while the divide’s overcoming is symbolized by cross border cooperation for nature conservation.
World Heritage List

- Transboundary objects (31, 1007)
- Struve Geodetic Arc. Is a chain of survey triangulations stretching from Hammerfest in Norway to the Black Sea, through 10 countries and over 2,820 km.
- These are points of a survey, carried out between 1816 and 1855 by the astronomer Friedrich Georg Wilhelm Struve, which represented the first accurate measuring of a long segment of a meridian.
Criterion (iv): The Struve Geodetic Arc is undoubtedly an outstanding example of technological ensemble – presenting the triangulation points of the measuring of the meridian, being the non movable and non tangible part of the measuring technology. +(VI Criterion)
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.
Baltic Green Belt

- Baltic Sea Region, INTERREG IV B-Project
- January 2009 – January 2012
- Lead partner: University Kiel
- **22 partners** (13 partners and 9 associated partners)
- 7 participating countries: Germany, Poland, Russia, Lithuania, Latvia, Estonia and Sweden (Coalition Clean Baltic)
- www.balticgreenbelt.uni-kiel.de
Green Belt at the Baltic Sea

Characteristics of the coast:
- no neighbours across GB
- different problems than on land

Major problems
- loss of biodiversity
- eutrophication
- management conflicts

→ Approach of integrated coastal zone management (ICZM)
Project goals

- **Improvement of the ecological status** of the terrestrial and marine Baltic Sea area
- Development of an **ecological network** under the umbrella of the European Green Belt in the Baltic Sea area
- Fostering **transnational collaboration** of stakeholders in sustainable development of the coast
- Identification of **barriers and success factors of ICZM** ( = sustainable coastal development)

**until 2008**

**since 2009**
Mosaic of pilot activities

- Valuing of natural & cultural heritage
- Participative island management
- Military heritage based tourism
- Awareness raising for coastal nature protection
- Sustainable animal farming
- Coordination of Coastal Nature Protection
- Marine Nature Protection

Source: http://www.europeangreenbelt.org/005.database_gallery.gis.html
Contributing to EGB communication

- Corporate Design
- Project website
- Newsboard
- National websites (EE, PL, LV)
- Blog

www.balticgreenbelt.net

25. September: Was ist eigentlich das Grüne Band?

Ich bin auf dem Weg zum Grünen Band im Baltikum. Aber was hat es eigentlich mit dem Grünen Band auf sich? Während des Kalten Krieges wurde die ehemalige Grenze zwischen Ost und West, der Ennere Vorhang, 40 Jahre lang von Industriesiedlungen, Straßenbau, Tourismusentwicklung und anderen Großprojekten des Menschen bewahrt, denn sie war durch das Militär gegenüber der Öffentlichkeit abgeschirmt. So tat die
Estonian part of the Green Belt project

- Development of the recommendations for good practice coastal protection and conservation
- Implement good practice coastal protection and conservation in spatial planning
- To evaluate and make an inventory of Cultural Heritage of Green Belt in Estonia
- To compile a book and film about Estonian Green Belt
Green heritage – accidental outcome of the Soviet restrictions

Large areas of the Estonian coast and the majority of islands were closed to any major activity by the military - natural values increased considerably

Brown heritage (brownfields) - the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Soviet Military pollution
Military areas

- There was **1565** military objects of the former Soviet Union in Estonia;
- The area occupied **87,000** hectares;
- The largest military area was the artillery range at Aegviidu (more than 30,000 ha).
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.
Military objects in Hiiumaal in 1960. (J. Pärn)
Military Airfields

- The main sources of pollution were the tanks of fuel storages, pumping stations, tanking areas, also the runways where the weed control was done with petrol.
- The secondary sources of pollution, amortized bored wells, are up to now not grouted.
Environmental damage caused by the Soviet Army in Estonia

- For half a century, the Pakri peninsula was a terra incognita for Estonians – an unknown land, unreachable from the air, by sea or over land
- Rocket Forces, Ground Forces, Navy and Border Guard
- In 1968, a submariners training centre, where two models of a submarine with nuclear reactors were located, was completed

Buildings of the nuclear submariners’ training centre in Paldiski
Paldiski Nuclear waste disposal
Another nuclear waste: Sillamäe
Sillamäe nuclear waste disposal:
volume 8 million m³, contains:
1,830 tons of uranium,
850 tons of thorium
7.8 kg of radium
Sillamäe: the remediation concept

**Phase 1a**
1. A double row of steel reinforced concrete piles will be established between the toe of the dam and shoreline. Piles reach deep into clay.
2. A breakwater will be constructed against the wave erosion. Sea-side slope of the breakwater will be reinforced with granite boulders.

**Phase 1b**
1. A trench will be constructed between the tailing pond and hinterland to collect ground and surface water.
2. Water, collected in the trench, will be discharged into the sea by means of a drainage system.
3. A diaphragm wall will be constructed from the bottom of the trench down to the clay, in order to prevent ground and surface water infiltration into the tailings.

**Phase 2**
1. Interim cover will be placed onto tailing pond to facilitate tailings' consolidation. Tailings surface will be contoured and steep dams will be flattened.

**Phase 3**
1. A multilayer final cover will be placed on top of the interim cover.
2. Covered tailing pond will be re-vegetated and merged to local environment.
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.
Estonia’s sea coast and islands: natural beauty, geological formations, diverse landscapes...
Green heritage

40 new protected areas established along Estonian Green Belt zone after 1991.
Cultural heritage in Estonian Green Belt

- Each square meter of land under our feet has a history.
- The markers of their existence overlaid upon on the traces of countless earlier generations in the landscapes form the cultural heritage.
- A famous Estonian poet and writer Juhan Liiv has said the golden words: 
  "He who does not remember the past, lives without a future".
Objects of cultural heritage

- An expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values (ITCC, 2002)
- Cultural Heritage is often expressed as either Intangible or Tangible Cultural Heritage

- Heritage is a political, evaluating choice from the past, which is however always more or less a subjective decision
Inventory methodology

- The Inventory Methodology based on the RMK methodology for inventorying cultural heritage devised by Tarang and Kusmin
- The inventory did not evaluate objects from the perspectives of cultural or exhibitional values during the inventory because the data gathered was insufficient for objective evaluation
- Thus, all objects had to be treated equally as potential objects of cultural heritage (OCH)
Inventory methodology

- The inventory required pre-selection maps indicating background data about the specific 200 metre coastal zone.
- The inventory area was covered on foot in order to check that OCH marked on the pre-selection map did exist and to map all the area.
- Details of every OCH were recorded, such as name, type code, location data, the extent of the object and the land parcel where the object was located.
Composition of the Pre-Selection Map

- Analysis of historical maps
  - Maps from 1895 – 1917
  - Topographic maps from 1940
  - Cadastical map from 1980

- Baltic Sea coastal protection zone (EELIS) 200 m

- Estonian Nature Information System (EELIS)
  1. Single nature object (under protection)
  2. Woodland key habitats
  3. Protected objects in local level
  4. Geologically important objects
  5. Other remarkable objects
  6. Nature objects archive
  7. Cultural heritage

- Nationally protected cultural heritage

- Pre-selection Map

- Municipalities administrative boundaries

- Estonian topographic map 1: 10 000

- Base map
Inventory methodology

- The object’s condition was photographically recorded
- The human impact that had affected or may potentially affect the object were examined
- A wealth of other relevant information was collected and recorded
- The information compiled by the inventory comprised the data for the study’s OCH database
Where?

- The inventory covered the entire Northern and Northwestern coast of Estonia, the offshore coasts of Hiiumaa and Saaremaa and the entire coast of Vormsi island to a depth of 200 metres from the mean tidal position.

- Towns located in the coastal area were excluded from the inventory area with the exception of Paldiski.
Who?

- By Estonian University of Life Sciences students and other volunteers
- Some experts, contractual workers and NGO-s are involved as well
Thank Them!

Tiina Arnek, Allan Juha, Henri Järv, Kauri Kivipöld, E. Lepik, Silver Riisalo, Luule Lõhmus, Kertu Sapelkov, Helena Semm, Taaniel Sepp, Priit Tomson
GIS facilitates the use of data by officials and other stakeholders

The information recorded in the database can be used when preparing conservation plans, creating protected areas or for tourism marketing purposes.
<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>30001</td>
<td>Radio telescope at Irbene</td>
<td>The radio telescope at Irbene was at one time used for anti-espionage purposes. There were various military units and objects in Irbene, including a military housing estate that has now been abandoned. The radio telescope is now run by the Radio Astronomy Centre of the Latvian Academy of Sciences for scientific purposes. Guided tours of the object are available.</td>
</tr>
<tr>
<td>30002</td>
<td>Karaosta: Naval base</td>
<td>The Karaosta canal and its naval and submarine base date back to the tsarist era in advance of World War I. The former submarine base is now closed to visitors and is used for business purposes. The canal can be viewed from Pulvera Street and the restored Kalpaks bridge.</td>
</tr>
<tr>
<td>30003</td>
<td>Kolka: Coast guard post</td>
<td>The Cape of Kolka is freely accessible to local residents and tourists today, but the border guard facility still serves its purposes and is not open to civilians.</td>
</tr>
<tr>
<td>30004</td>
<td>Kolka: Naval radio communications facility</td>
<td>This military object ensured radio communications. Now the facility is owned by the Latvian Defence Ministry, and it can only be viewed from the outside.</td>
</tr>
<tr>
<td></td>
<td>Mazirbe: Coast guard facility</td>
<td>This coast guard facility was housed in a building that used to be a maritime school. In the post-Soviet era, accommodations were offered at the building. The coast guard tower is one of the best-preserved objects of its kind along the Latvian shoreline.</td>
</tr>
</tbody>
</table>
Inventory results

- Estonian OCHs consist of 139 types (e.g. function, material, era, cultural source)
- The inventory identified 1,268 OCHs consisting of 72 types, which for ease of display were amalgamated to form 21 types
- The largest group of OCHs in the inventory area (25%) are from the Soviet occupation
Military objects

- Radar, missile and naval bases
- Border guard facilities
- Watch towers
- Airfields
- Harbours
- Shelters and bunkers
Inventory results

- The inventory identified 177 historical homesteads and 74 manor farmhouses.
- The inventory recorded at least 96 rocks, most of which were used for sacrifices or other religious purposes and connected with legends.
- Many seamarks were also recorded, of which the majority were lighthouses.
Most popular object types

- * military objects
- ** military objects from WWI and WW2, War of Independence (WOI)
- *** objects of cultural heritage from the Soviet Union period, e.g. milk trestles, production buildings, ensilage pits
- **** objects of less than 13 per type
Protection of OCH

- Over 80% of the objects surveyed in Estonian Green Belt had not previously been surveyed as objects of cultural heritage (OCHs)
- While 13% of the OCHs had previously been surveyed and included in the database of EELIS

- 35% (529 objects) of the surveyed OCHs are located in the coastal protected areas
Current human pressure

- The inventory of the coastal areas of the Green Belt found 261 instances of current human pressure.
- These included buildings (184) in the building exclusion zone, showy modern buildings (43) outside the building exclusion zone, but which seem to dominate the landscape and landscape disturbances (34) such as illegal rubbish depositories or extracted soil.
Real estate developers dream
Real estate developers dream
Real estate developers dream
Many objects are...

- Useless
- Boring
- Ugly
- Dangerous etc.
Reasonable re-use of MHO

- Essentially any form of re-use, which maintains the characteristics of the MHO, is better than losing it.
- We can use the existing MHOs to develop a Military Cultural Heritage that is of interest to more people.
- So, owners of MHOs, who do not have any idea of what to do with them, should practice intentional neglect.
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.

Saka manor ja Käsmu maritime museum
Hiiumaa Military Museum
Use of old military airfields
Possible use of old hangars
Some final remarks

- There are numerous examples of Soviet military facilities and buildings on the shores and islands that have both historical and cultural value.

- The value of historical heritage is the sum of both the good and the bad (the positive and the negative aspects), and therefore no nation should have the right to delete a profoundly negative aspect of their historical past.

- Furthermore, objects that seem disagreeable to the current generations may for future generations become an interesting and precious study tool.
Some final remarks

- Military landscapes and installations and any other Military Heritage objects are not eyesores to be destroyed.
- Furthermore, we should only clean off or render safe unsecure or dangerous MHOs, not just eradicate them.
- They actually represent a vast cultural and economic resource, which Estonia should investigate thoroughly, preserve wisely and use sensibly.
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.

http://www.estoniangreenbelt.eu
Exhibition of Estonian Green Belt
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.
The Estonian Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.

Author: Jüri Pärn
- Anto Raukas
- Argo Peepson
- Luule Lõhmus
- Henri Järv
- Kalev Sepp

- Restricted access border zones of the Estonian Soviet Socialist Republic
- Soviet military infrastructure and its formation in Estonia
- Soviet military pollution and elimination operations
- Soviet border zone and values of Estonian coastal areas
- Cultural heritage in Estonia’s Green Belt
Baltic Green Belt is partly financed by the European Union (ERDF) within the Interreg IVB Programme.
Green Belt Europe

Requirements

- European Parliament should adopt a **resolution for the protection of the European Green Belt**, also expressing support for the associated European Green Belt Initiative.
- The EU Parliament is asked to initiate and support **further trans-boundary projects and activities** and to establish a **financial support programme for the Green Belt** (nature conservation, nature tourism and regional development).
- A special focus should be put on **harmonising conservation management** on both sides of the former Iron Curtain and closing gaps by extending nature reserves across borders.
- **Green Infrastructure**: The Green Belt is already an indispensable part of a Green Infrastructure. Green bridges or similar measures should be applied for unavoidable crossings of the Green Belt.
- Due to its outstanding significance for nature conservation and its historic dimension as a European commemorative landscape, the EU should support a possible nomination of the Green Belt as **UNESCO-World Heritage**.
Thank you!!