

„Geodata research on former military training area Kyritz-Ruppiner-Heide“

in cooperation with Heinz-Sielmann-Stiftung

Frank Schneider – 25.04.2013

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What people saw...



Military parade German Democratic Republic 1989 (www.germanhistorydocs.ghi-dc.org)

What they didn't see

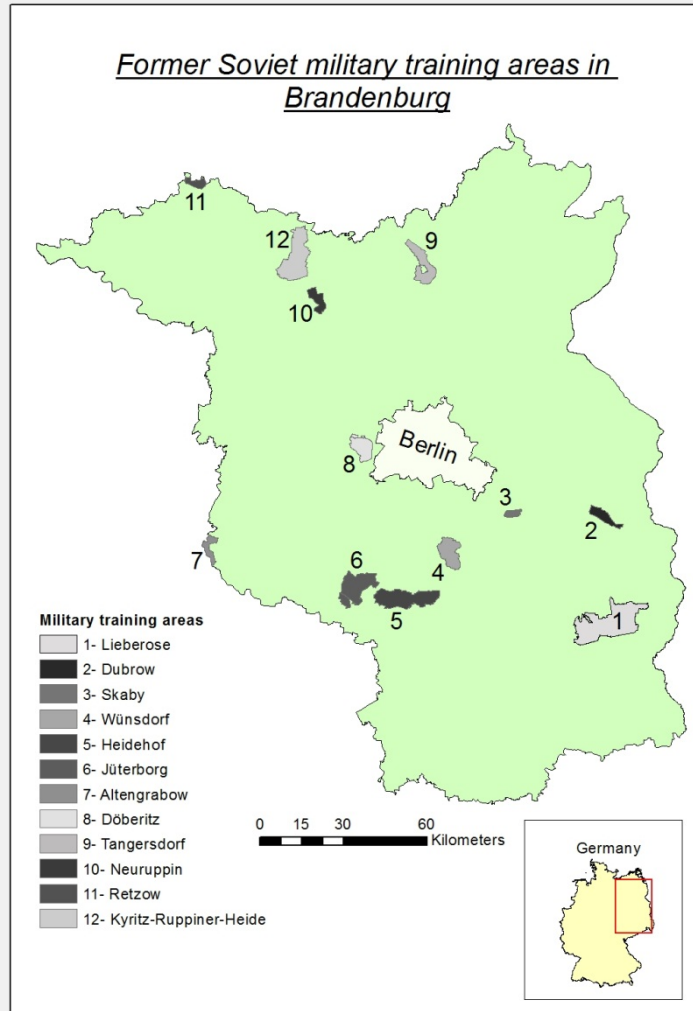


Former military training area Lieberose – 26 000 ha (MUGV, 2013), Picture: Google Earth (2013)

Situation in the early 90's in Brandenburg

- 8% of state area covered by military training areas (230 000 ha), (MUGV, 2013)
- Greatest share in Germany
- Withdrawal of Soviet army

What did they left?



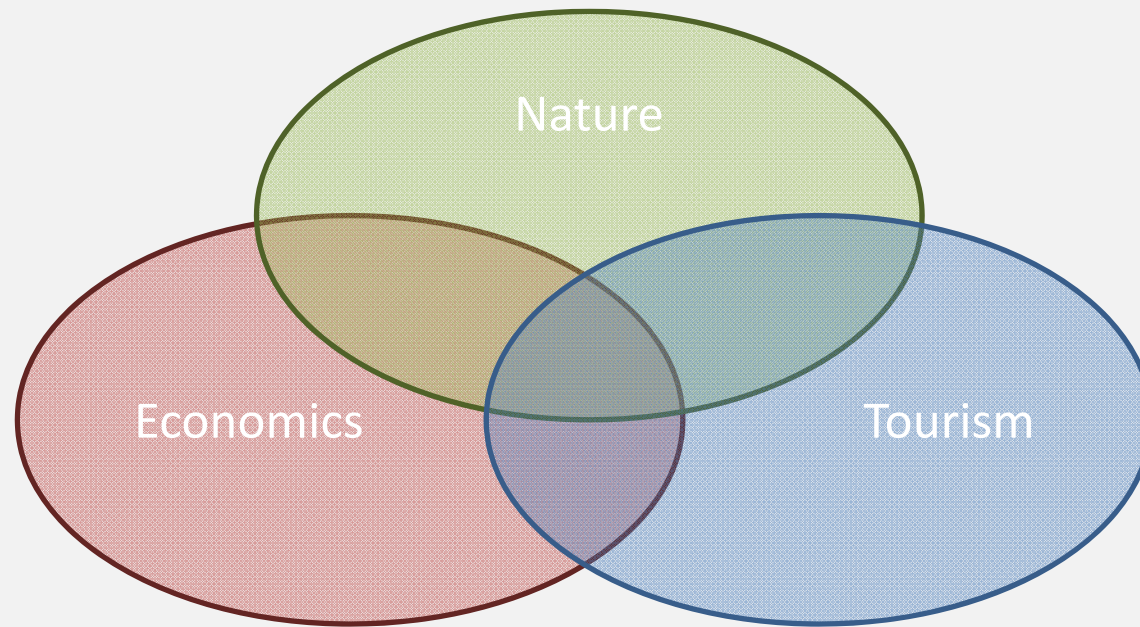
- Huge connected areas
- Unique in size (50 – 260 km²)
- Unsettled and uncutted
- Free of traffic infrastructure and economy use

Source: LGB Brandenburg ATKIS Basis-DLM (2012), Bundesamt für Kartographie und Geodäsie (2008)

Characteristics

- Isolated in time and space
- Independent vegetation development
- High biodiversity (Exceptional species rich in flora and Fauna)
- Broad spectrum of ecosystems

Conversion areas – How to use it?

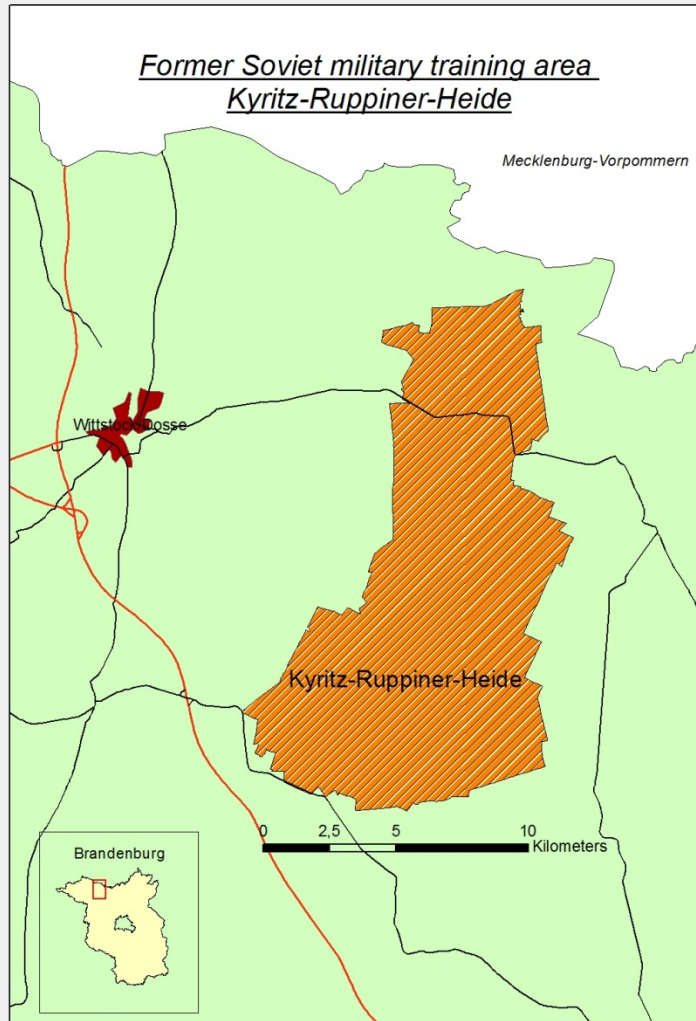


How to find a good solution?

- Data research
- Derive information from data
- Find arguments for further land use based on information

„Geodata research on the former
military training camp
Kyritz-Ruppiner-Heide“

Kyritz-Ruppiner-Heide



- Total size of area is 11900 ha
- 5900 ha covered by forest
- 6200 ha by heath and bare land

(Data: Gewiß, 2011)

Characteristics

- High intensity of military use
- Training area for artillery and bombings
- Highly polluted by ammunition and bombs

Characteristics



Images by Google Earth 2013

History

Time period	Land use form
<u>until 1948</u>	Forestry, agriculture
<u>1948 - 1993</u>	Military use by Soviet army
<u>1993 - 2010</u>	Military use by German Bundeswehr
<u>From 2010</u>	Nature conservation, investigation for other land use forms

Value of geodata

- Representation present of past periods
- Highly polluted with ammunition
- Access prohibition on fine
- Possibility to analyze area without entering

Goal of the project

- Collecting geodata
- Historical description of the research area by geodata
- Creation of data foundation for further scientific researches

Method

- Online database research
- Personal data review in geodata archives
- Storing and sorting researched data

Focus on

- Topographic maps
- Aerial images
- Orthofotos

Geodata archives

- Bundesarchiv
- Landesvermessung und Geobasisinformation
Brandenburg (LGB)
- Staatsbibliothek zu Berlin (SBBPK)
- Humboldt University Berlin
- Freie University Berlin

Results

Researched data of determined time periods			
<i>Until 1948</i>	<i>1948 - 1993</i>	<i>1993 - 2010</i>	<i>From 2010</i>
Schmettauisches Kartenwerk	Staatliches Kartenwerk der DDR	Topographic maps	Topographic maps
Preußische Urmesstischblätter	Historical aerial images	Aerial images	DLM
Karten des Deutschen Reiches		Ortho photos	Ortho photos
		Land cover classification	Land cover classification

Archivs

Data sets	Bundesarchiv	LGB	SBBPK	HU Berlin	FU Berlin
Schmettausches Kartenwerk	x	x	x		
Preußische Urmesstischblätter	x	x	x		
Karten des Deutschen Reiches	x	x	x	x	x
Kartenwerk der DDR	x	x	x	x	
Historical airborne images	x	x			
Modern topographic maps		x	x		
DLM		x			
Ortho photos		x			
Land use maps			x		

Preview

- Land cover change detection
- Scenarios for further vegetation development
- Detection of ammunition

Land use in future

- Nature conservation
- Tourism
- Forestry
- Other land use forms?

Conclusions

- Difficult to get data for the former GDR
- Excellent data pool from 1990
- Very good service at any archive
- Please consider the costs

Sources

- Ministerium für Umwelt, Gesundheit und Verbraucherschutz.
<http://www.mugv.brandenburg.de>, 2013
- Gewiß, Anika (2010): Die Kyritz-Ruppiner Heide. *Perspektiven für einen ehemaligen Truppenübungsplatz*. Greifswald
- German history in documents and images. URL:
<http://www.germanhistorydocs.ghi-dc.org>, visited last: 22.04.2013

Thank you ...

for your attention!