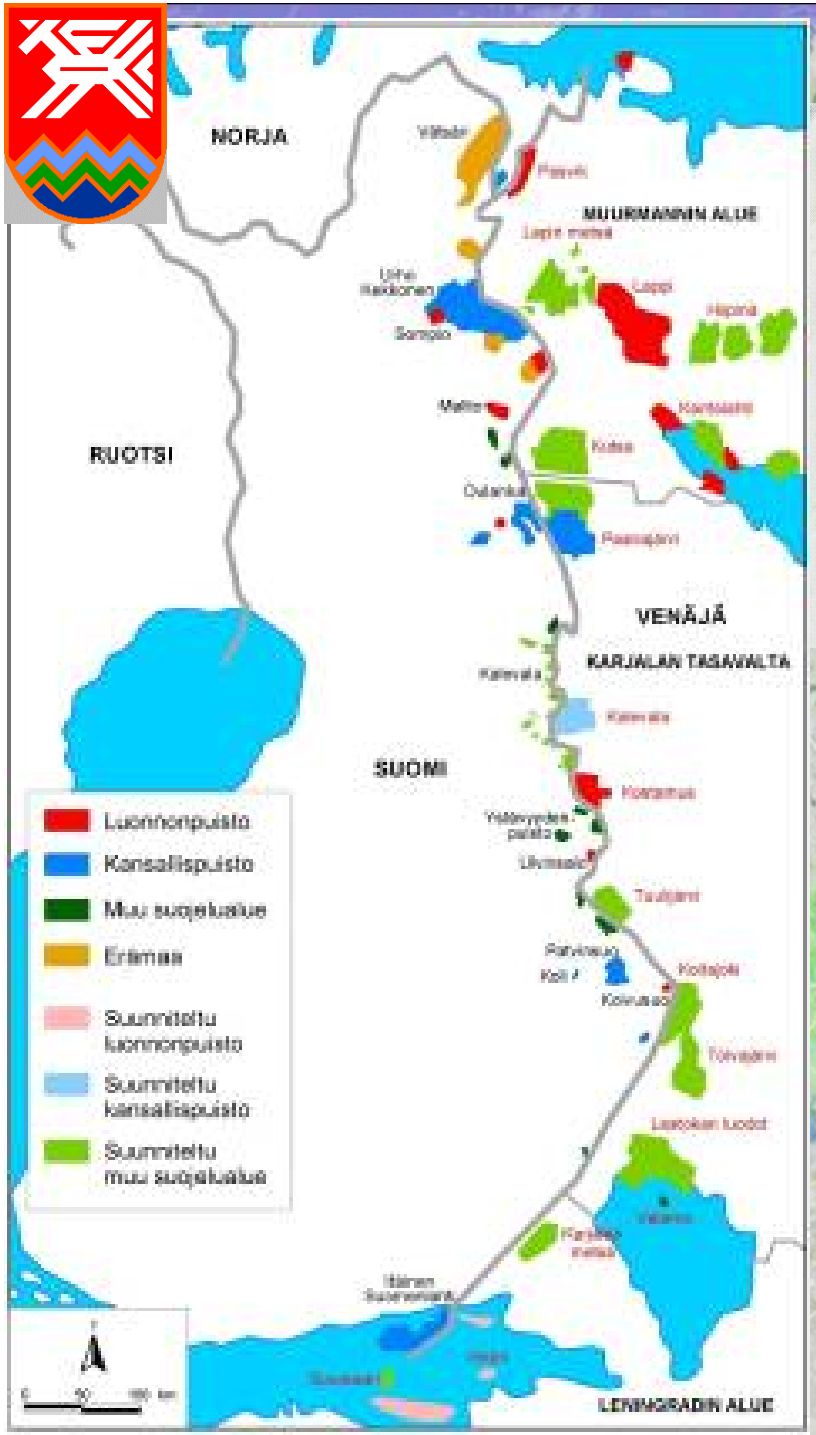
Research cooperation along the GREEN BELT OF FENNOSCANDIA

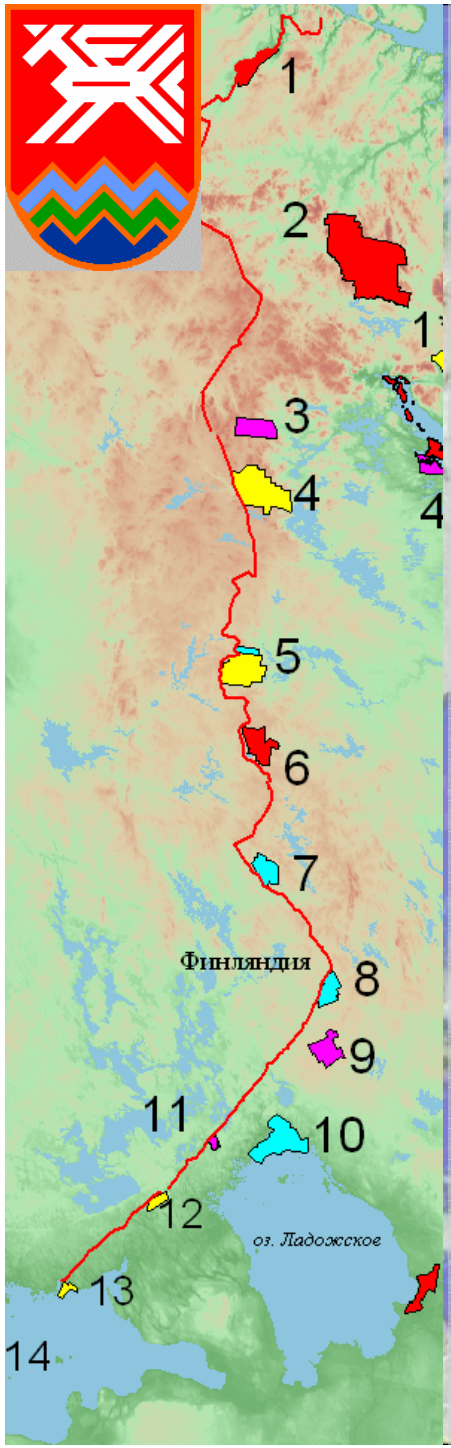
VIHREÄ VYÖHYKE
ЗЕЛЕНЫЙ ПОЯС
GREEN BELT

The 4th PAN EUROPEAN GB CONFERENCE

Kuhmo, 6.10.2010

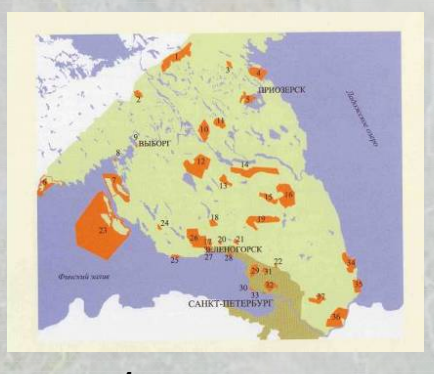


Early in the 1990s, scientists from Karelia and Finland put forward the idea of the “Green Belt of Fennoscandia”



Largest operating and planned PAs in the Green Belt of Fennoscandia

1. Pasvik zapovednik
2. Laplandsky zapovednik
3. Kutsa nature reserve (zakaznik)
4. Paanajärvi NP
5. Kostomukshsky zapovednik
6. Kalevalsky NP with Voinitsa landscape reserve (LR)
7. Tulos LR
8. Koitajoki LR
9. Tolvajärvi LR
10. Ladoga Skerries NP
11. Iso-Ijärvi LR
12. Karel'sky Les LR
13. Prigranichnyi LR
14. Ingermanlandsky zapovednik

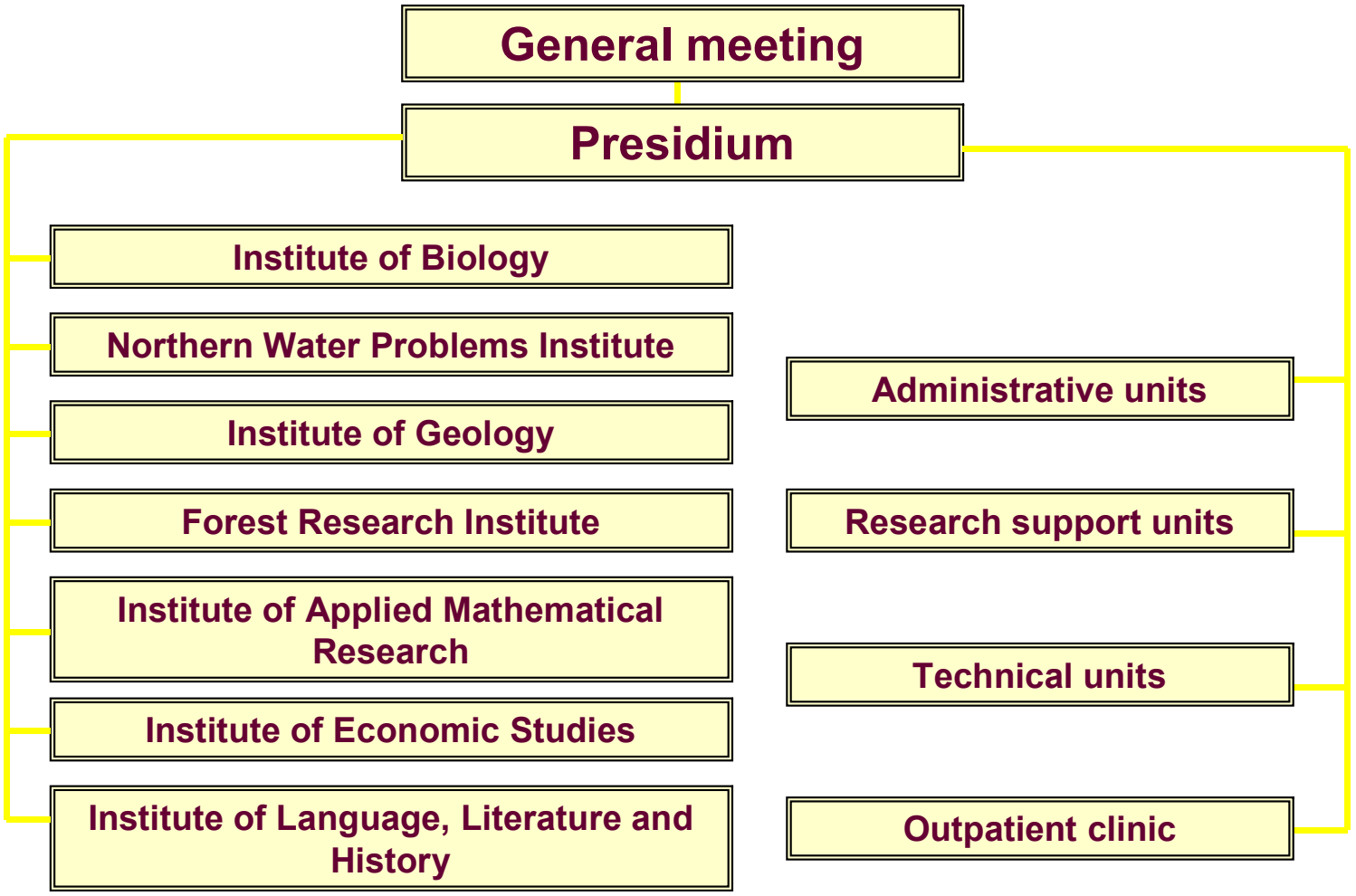


There are also some small-size LR Podkova, Kumi-porog, PAs of Karelian isthmus, etc.

Total area of the above PAs is about 800 000 ha

The structure of Karelian Research Centre RAS is one of the reasons of main topics of international cooperation

KRC of RAS Structure



Finland has traditionally been the main partner in KRC of RAS international cooperation

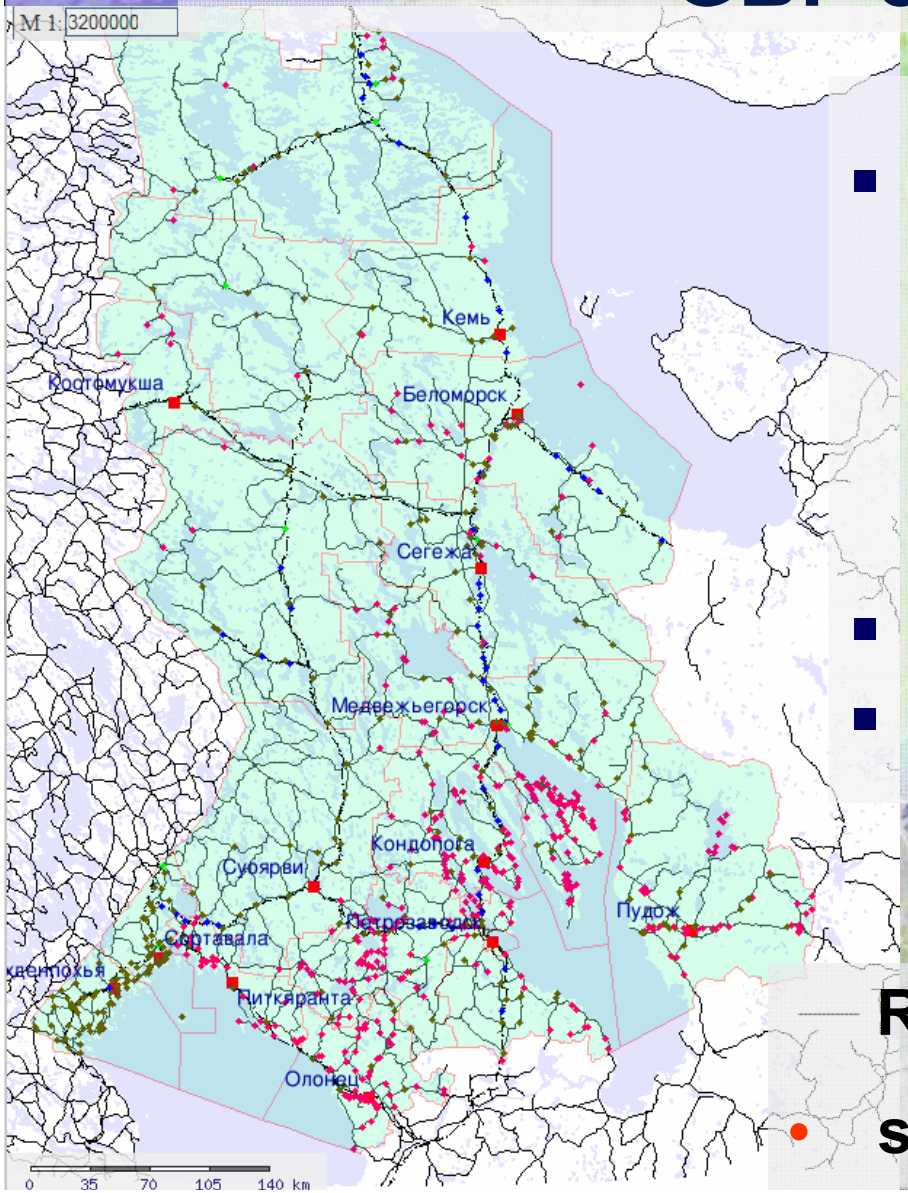
► Main partner research organizations in Finland:

- Ministry of the Environment, Finnish Environment Institute (SYKE), Regional Environment Centres
- Ministry of Agriculture and Forestry, its subordinate institutions (Game and Fisheries Research Institute, Metsähallitus, Metla, etc.)
- Universities of Helsinki, Joensuu, Oulu, Kuopio, Turku
- Finnish Geological Survey

International co-operation project themes

- Ecology and nature protection
- Natural resource studies
- Nature management
- Zoology
- Botany
- Soil science
- Hydrology and water resource studies
- Mineral resources and geology
- Economy and sociology
- Ethnology and political science
- History
- Folklore etc.

Integrity of nature in border areas of Karelia – is the basic point for GBF creation



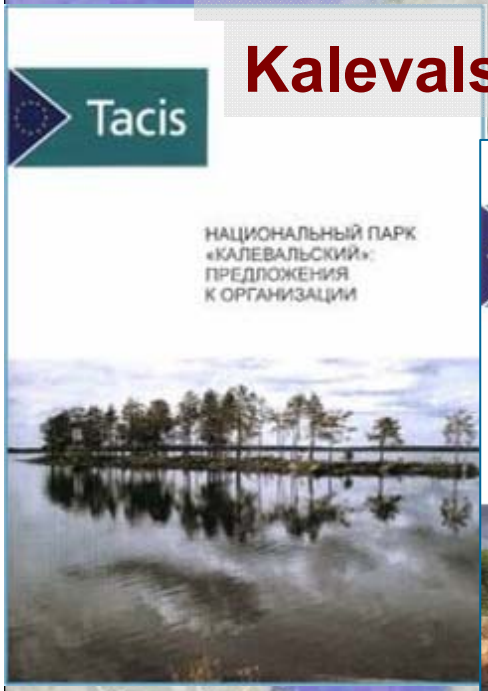
- Quite low industrial use of the territories along Russian-Finnish border, and well-preserved natural complexes, historical and cultural monuments
- Low industrial pollution
- Low population density

Roads

settlements

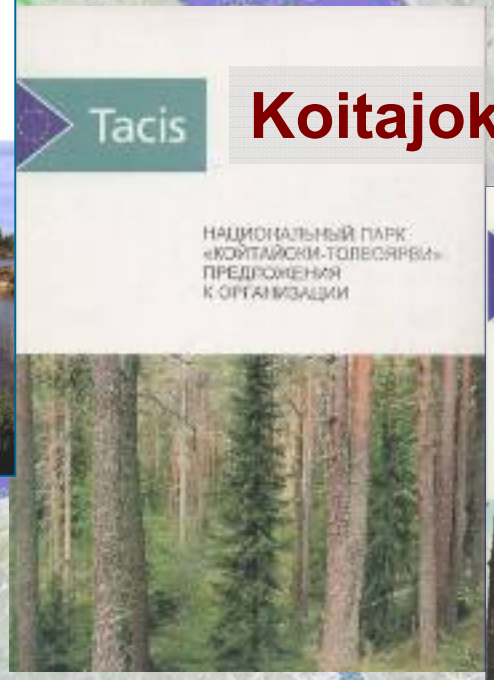
Feasibility studies for designation of PAs

Kalevalsky



Ladoga Skerries

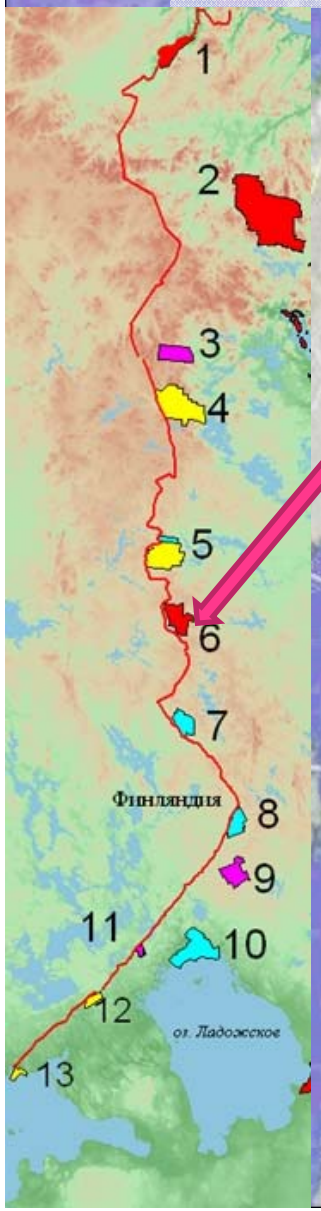
Koitajoki - Tolvajärvi



Tulos

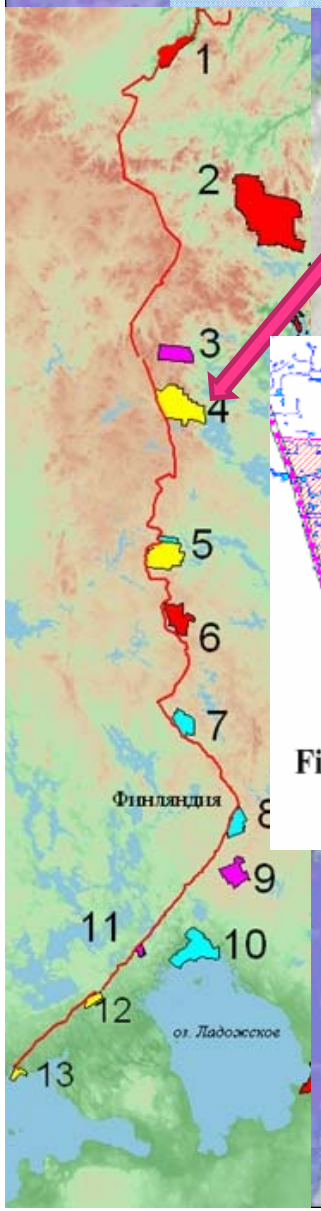
Zapovednik «KOSTOMUKSHSKII»

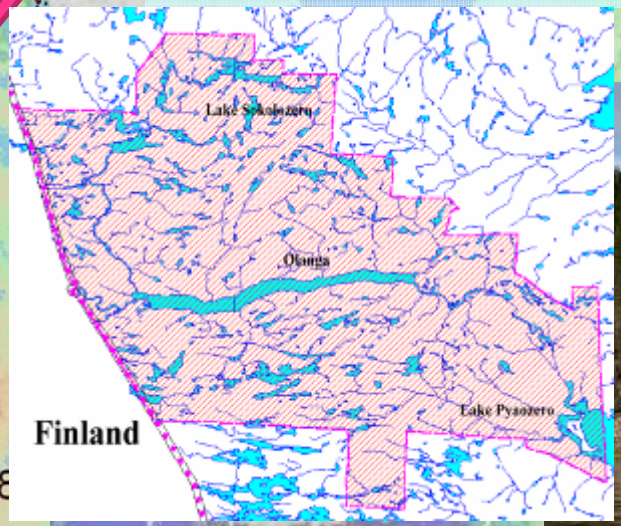
- Founded in 1983
- 47569 ha
- 1990 – Friendship Park
- Proposed by Karelian Research Centre RAS

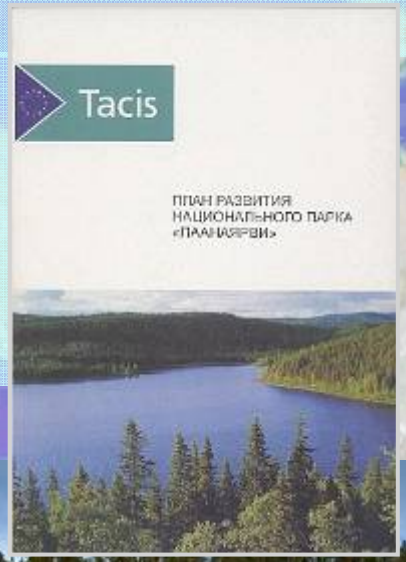


NP «PAANAJARVI»

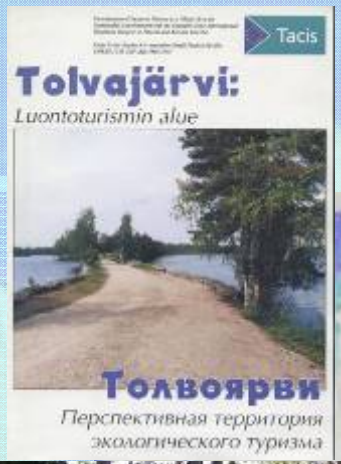
- Founded in 1992
- 104 354 ha
- Proposed by Karelian Research Centre RAS



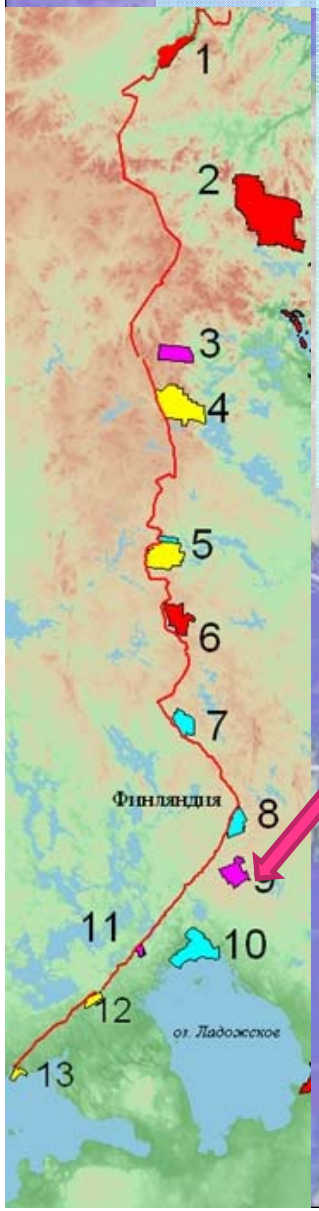




LR «Tolvojarvi»

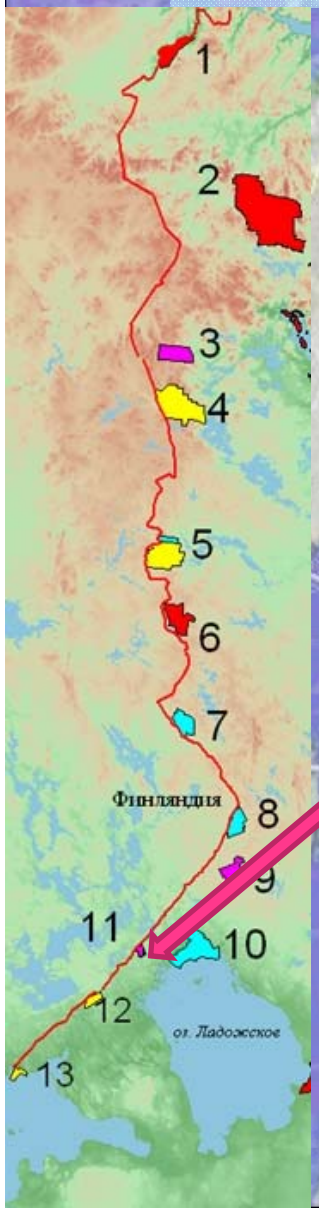


- Founded in 1995
- 41900 ha
- Proposed by Karelian Research Centre RAS



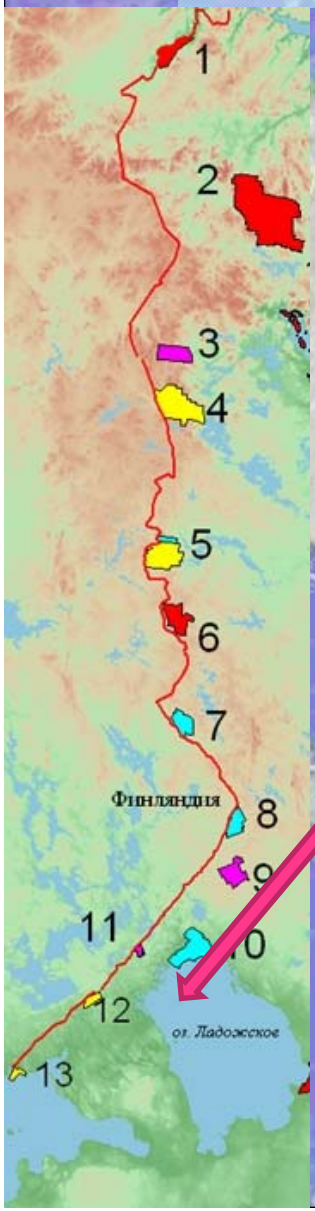
LR «ISO-JARVI»

- Founded in 1995
- 5778 ha
- Proposed by Lahdenpohja city administration and Karelian Research Centre RAS

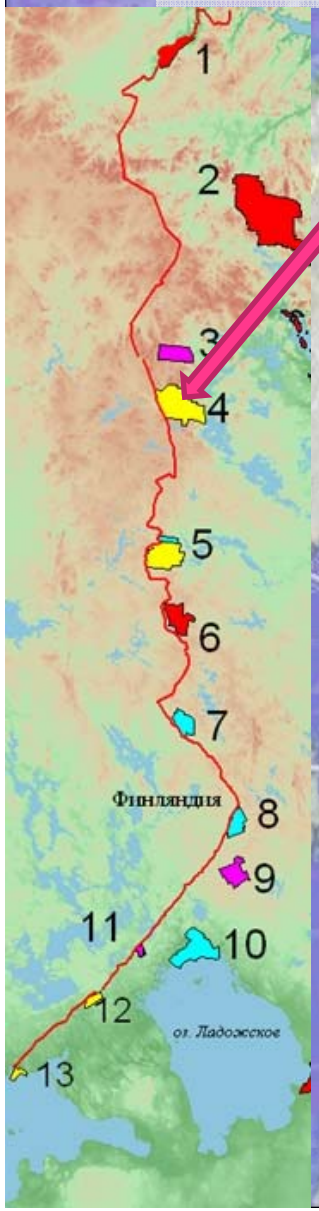


LR «ZAPADNYI ARCHIPELAG»

- Founded in 1996
- 19527 ha
- Proposed by Karelian Research Centre RAS



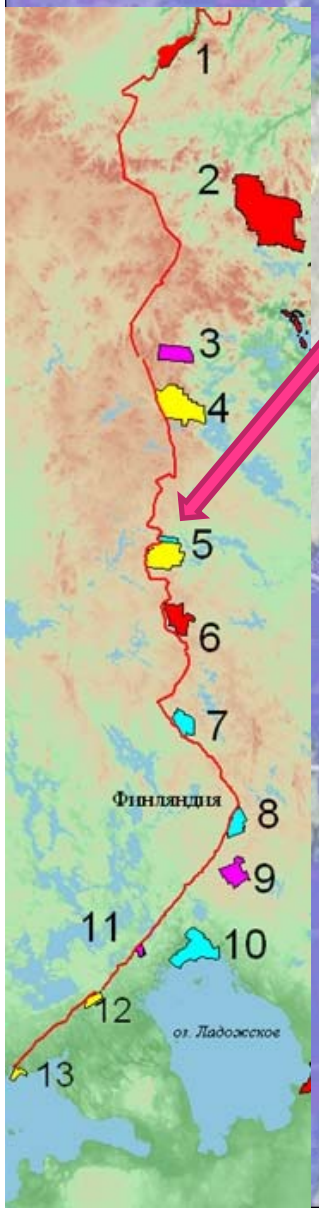
NP «KALEVALSKII»



- Founded in 2006
- 74400 ha
- Proposed by Karelian Research Centre RAS

After a nearly 10-year break, when no new PAs were created, Kalevalskii NP (area – 74,400 ha) was designated by Decree of the Russian Federation Government (30.11.2006)

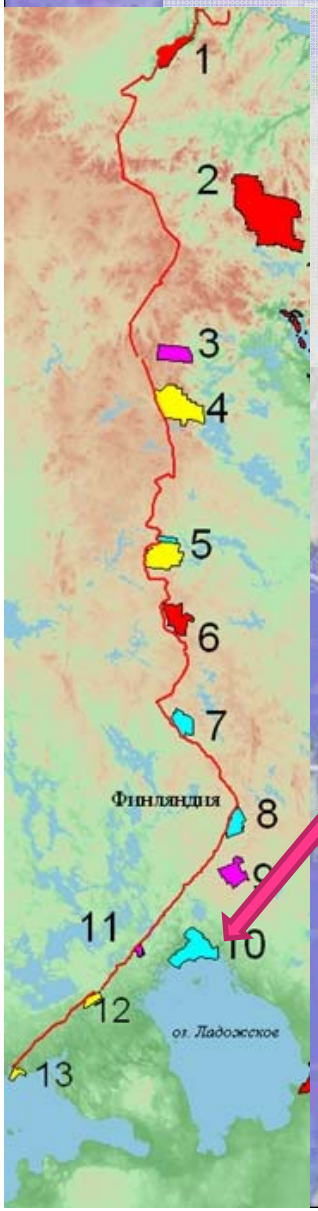
LR «VOINITSA»

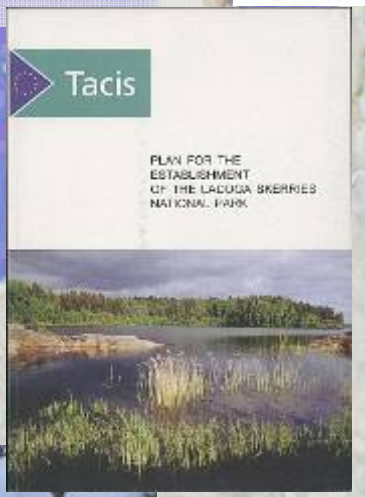


- Founded in 2008
- 8400 ha
- Proposed by Karelian Research Centre RAS

NP «LADOGA SKERRIES»

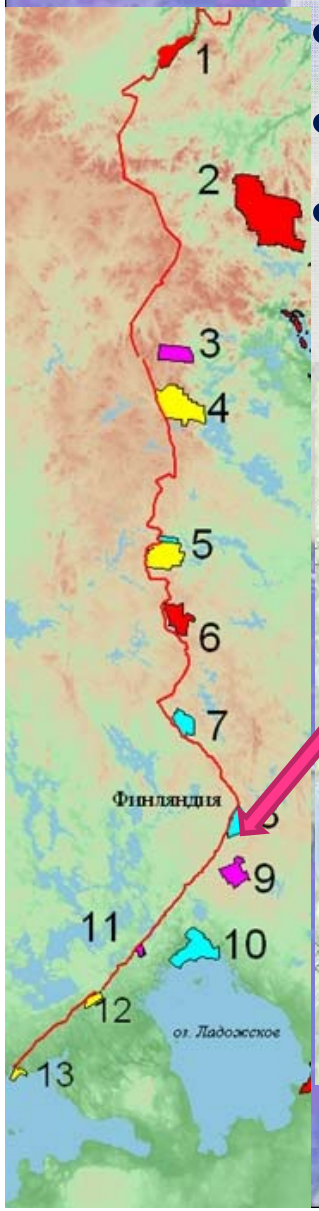
- Plan (2010)
- ? 120000 ha
- Proposed by Karelian Research Centre RAS



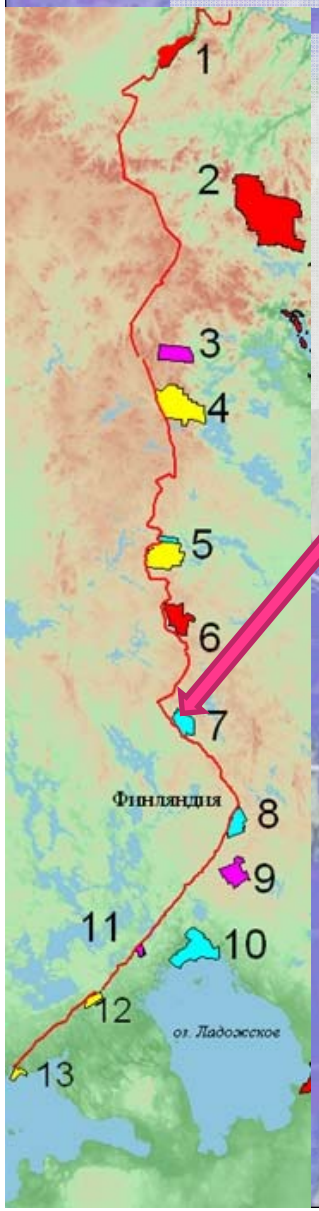


LR «KOITAJOKI»

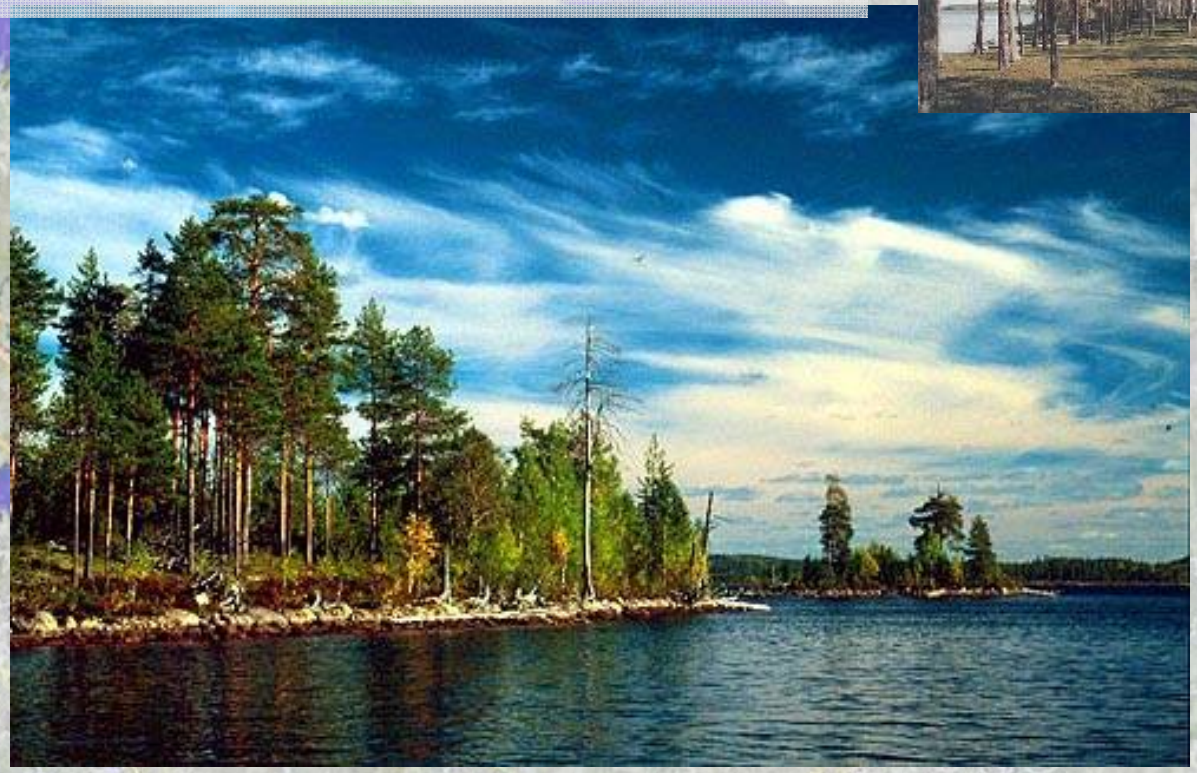
- Plan
- ? 36300 ha
- Proposed by Karelian Research Centre RAS



LR «TULOS»

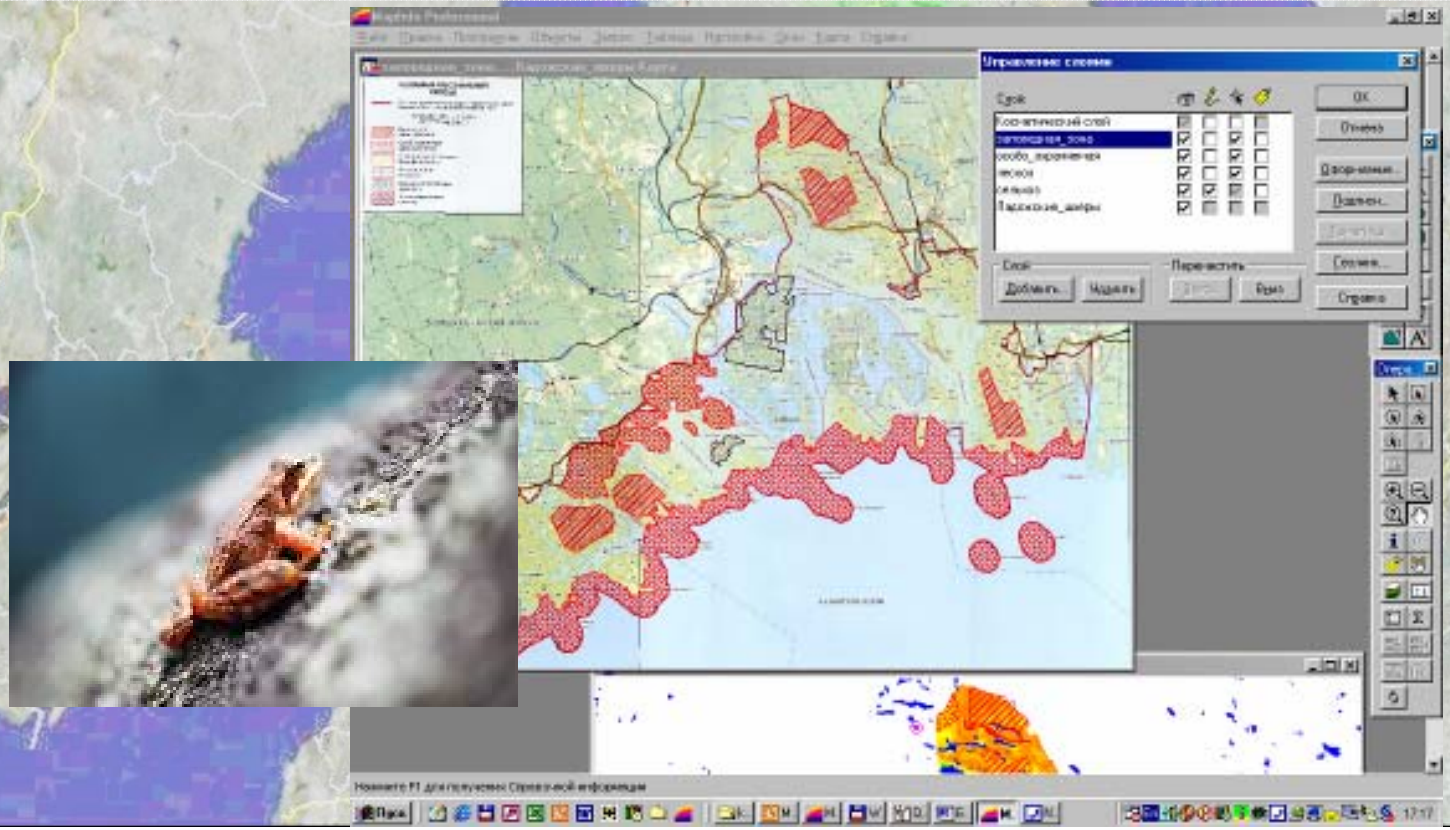


- Plan
- ? 68500 ha
- Proposed by Karelian Research Centre RAS



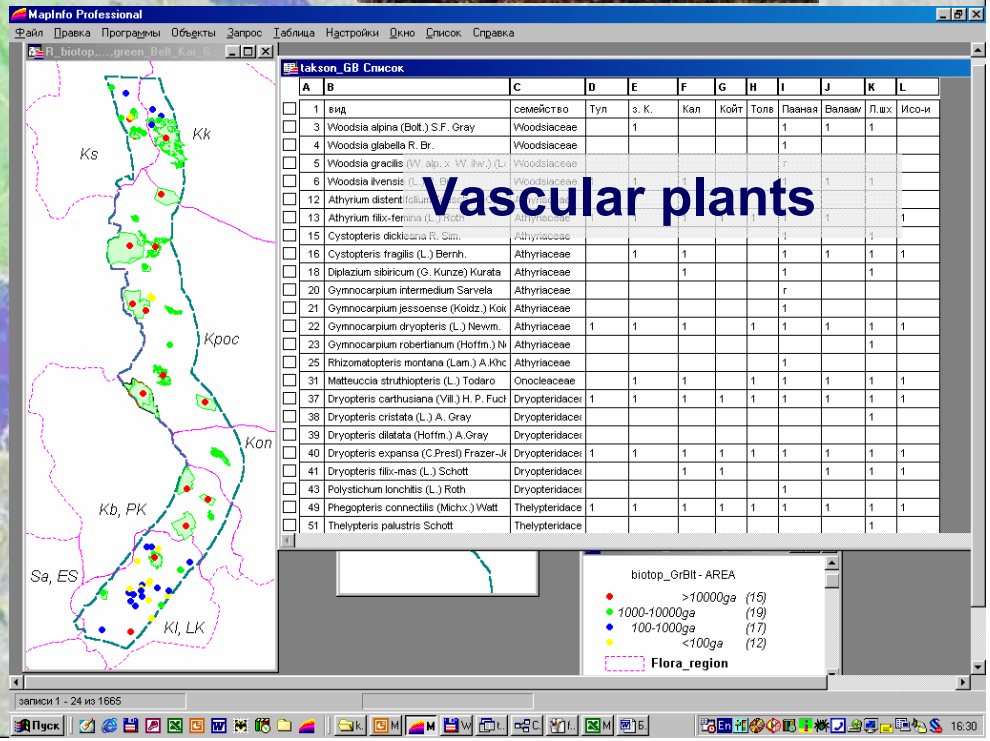
Some results of international projects

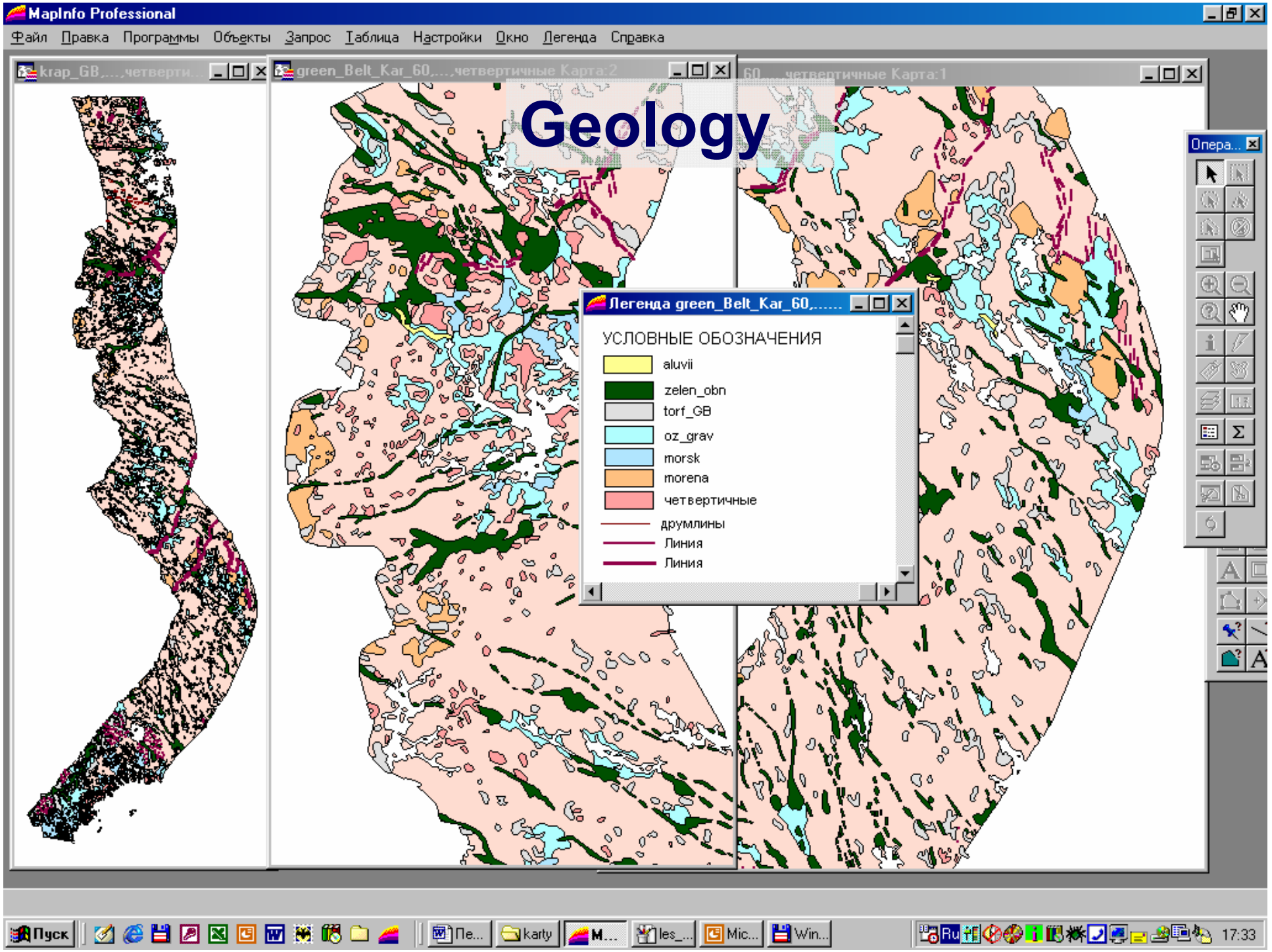
- Compilation of shared scientific databases on various natural resources, biodiversity and specific features of territories



DATABASES

- Fungi
- Lichens
- Algae
- Moss
- Vascular plants
- Insects
- Birds
- Mammals

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Опера...
Geology
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УСЛОВНЫЕ ОБОЗНАЧЕНИЯ
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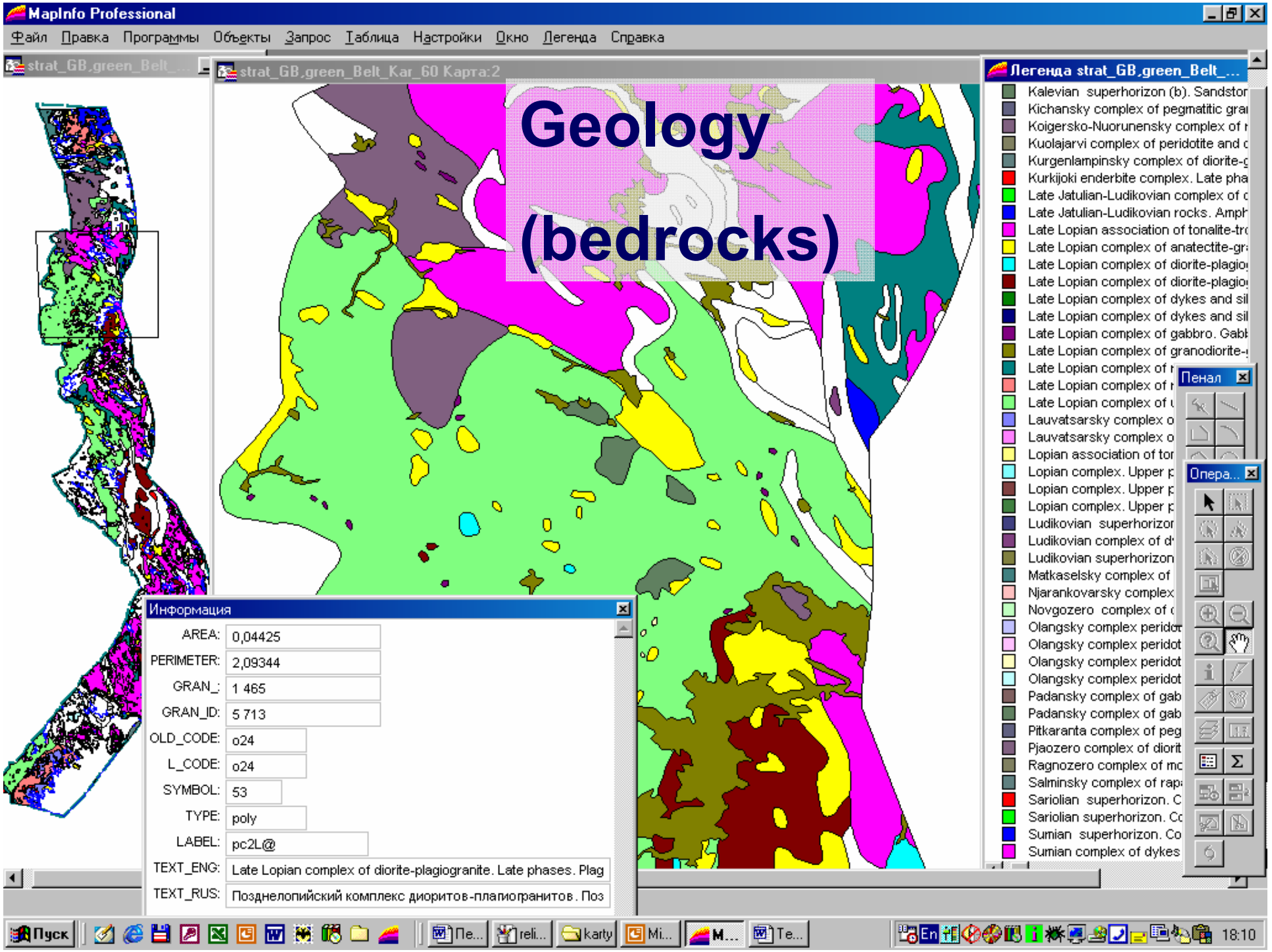
MapInfo Professional
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strat_GB,green_Belt_Kar_60 Карта:2
Geology
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Kuolajarvi complex of peridotite and
Kurgenlampinsky complex of diorite-
Kurkijoki enderbite complex. Late pha
Late Jatulian-Ludikovian complex of
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Ragnozero complex of mc
Salminsky complex of rap
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Sariolian superhorizon. Co
Sumian superhorizon. Co
Sumian complex of dykes
Пенал
Опера...
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L_CODE: o24
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TEXT_RUS: Позднелопийский комплекс диоритов-плагиогранитов. Поз
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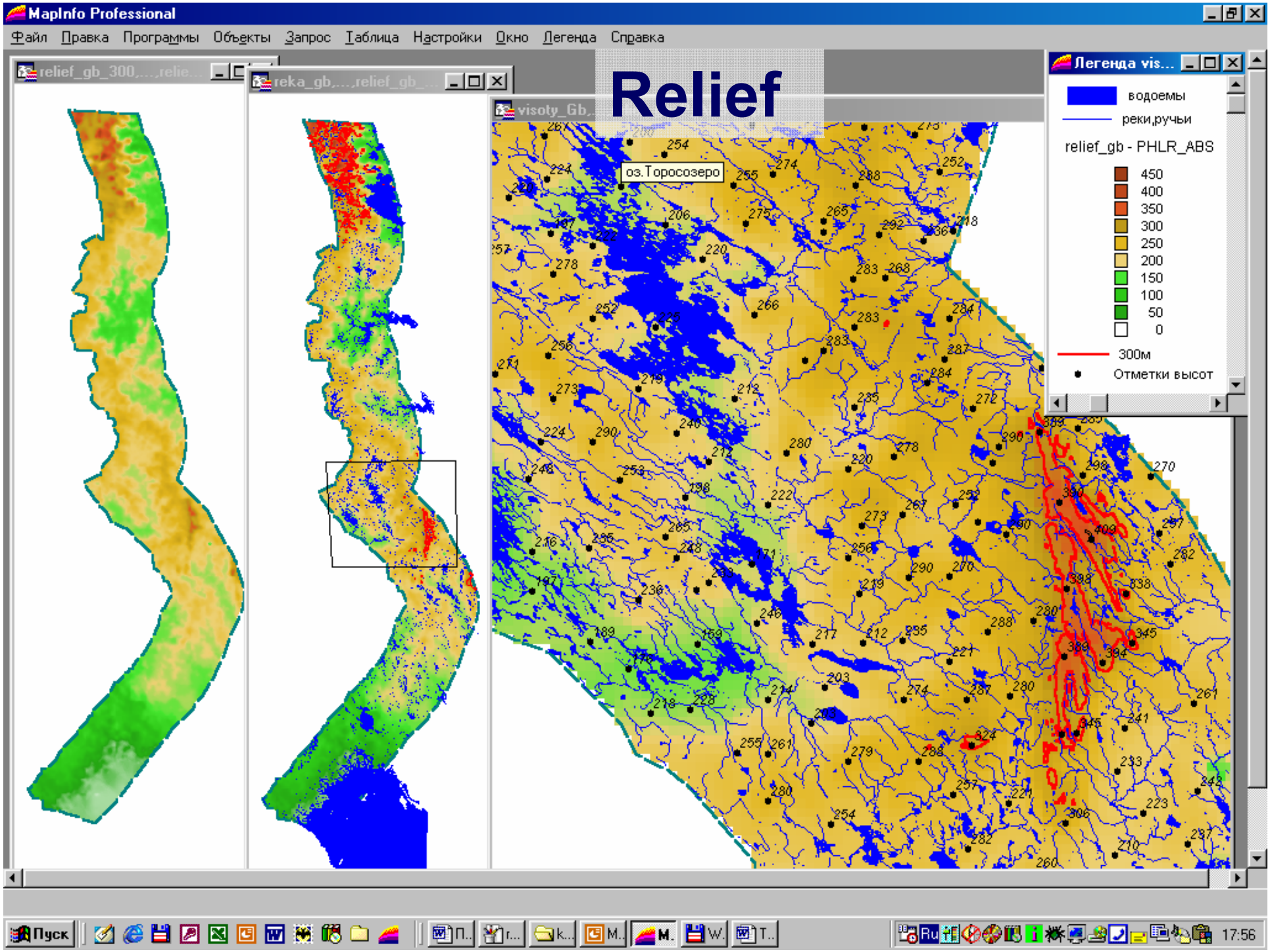
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Relief
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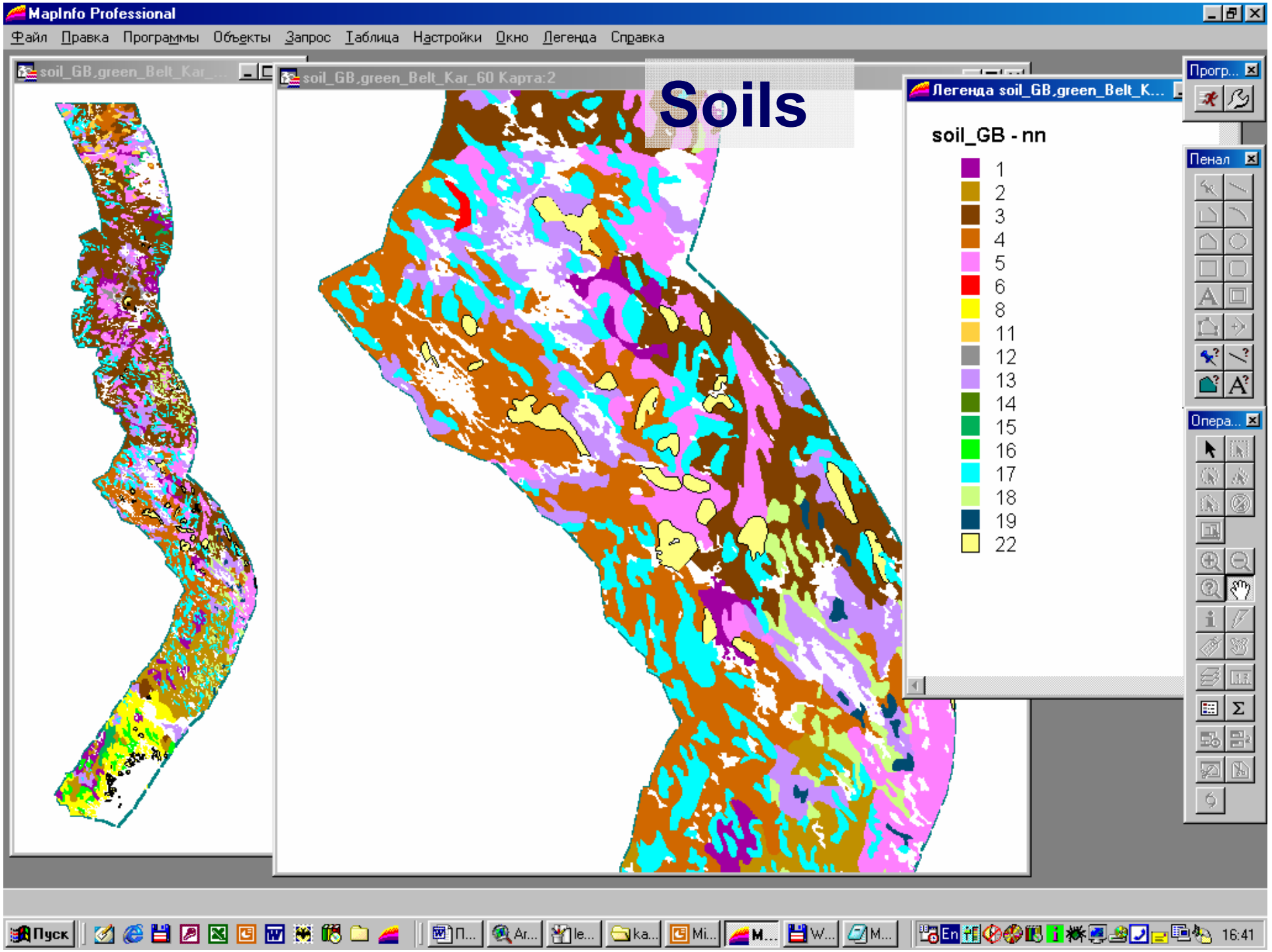
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soil_GB,green_Belt_Kar_60 Карта:2
Soils
Легенда soil_GB,green_Belt_K...
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Пуск
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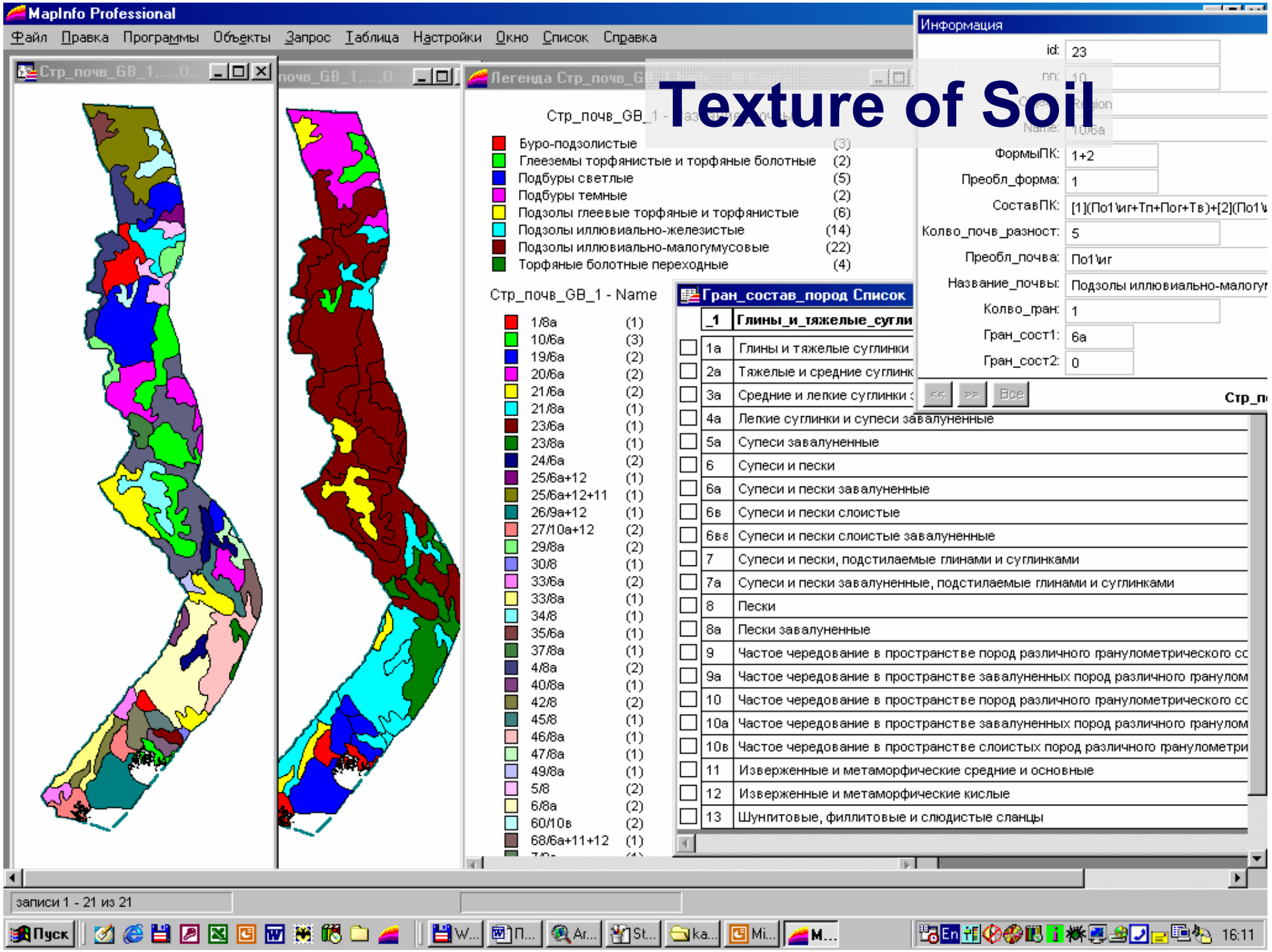
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Texture of Soil
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Стр_почв_GB_1 -
Буро-подзолистые (3)
Глееземы торфянистые и торфяные болотные (2)
Подбуры светлые (5)
Подбуры темные (2)
Подзолы глеевые торфяные и торфянистые (6)
Подзолы иллювиально-железистые (14)
Подзолы иллювиально-малогумусовые (22)
Торфяные болотные переходные (4)
Стр_почв_GB_1 - Name
1/8а (1)
10/6а (3)
19/6а (2)
20/6а (2)
21/6а (2)
21/8а (1)
23/6а (1)
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26/9а+12 (1)
27/10а+12 (2)
29/8а (2)
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33/8а (1)
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37/8а (1)
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42/8 (2)
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47/8а (1)
49/8а (1)
5/8 (2)
6/8а (2)
60/10в (2)
68/6а+11+12 (1)
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_1 Глины_и_тяжелые_сугли
1а Глины и тяжелые суглинки
2а Тяжелые и средние суглинк
3а Средние и легкие суглинки
4а Легкие суглинки и супеси завалуненные
5а Супеси завалуненные
6 Супеси и пески
6а Супеси и пески завалуненные
6в Супеси и пески слоистые
6вг Супеси и пески слоистые завалуненные
7 Супеси и пески, подстилаемые глинами и суглинками
7а Супеси и пески завалуненные, подстилаемые глинами и суглинками
8 Пески
8а Пески завалуненные
9 Частое чередование в пространстве пород различного гранулометрического со
9а Частое чередование в пространстве завалуненных пород различного гранулом
10 Частое чередование в пространстве пород различного гранулометрического со
10а Частое чередование в пространстве завалуненных пород различного гранулом
10в Частое чередование в пространстве слоистых пород различного гранулометри
11 Изверженные и метаморфические средние и основные
12 Изверженные и метаморфические кислые
13 Шунгитовые, филлитовые и слюдистые сланцы
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СоставПК: [1](По1\иг+Тп+Пог+Тв)+[2](По1\
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Преобл_почва: По1\иг
Название_почвы: Подзолы иллювиально-малогу
Колво_гран: 1
Гран_сост1: 6а
Гран_сост2: 0
<< >> Все
Стр_п
записи 1 - 21 из 21
Пуск
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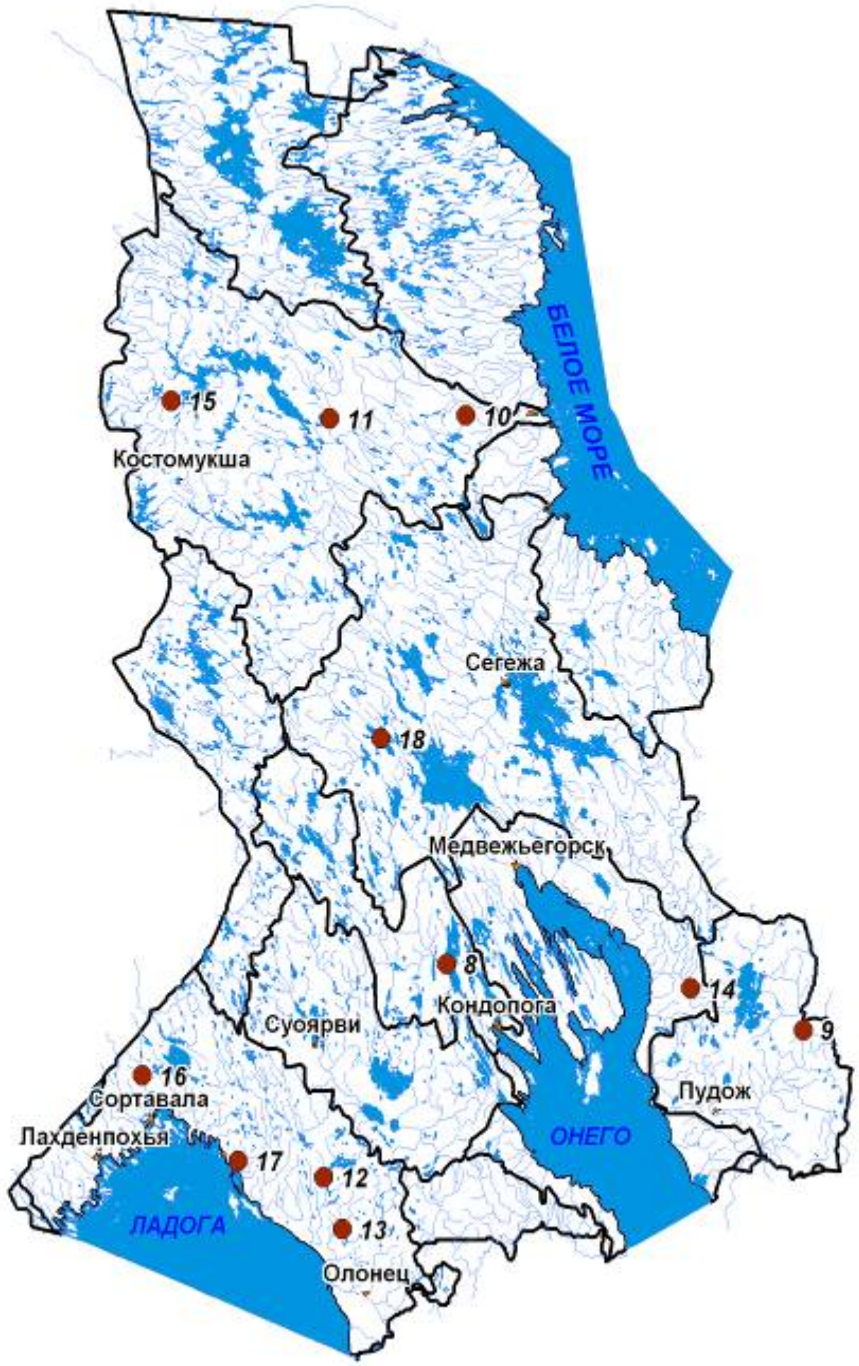
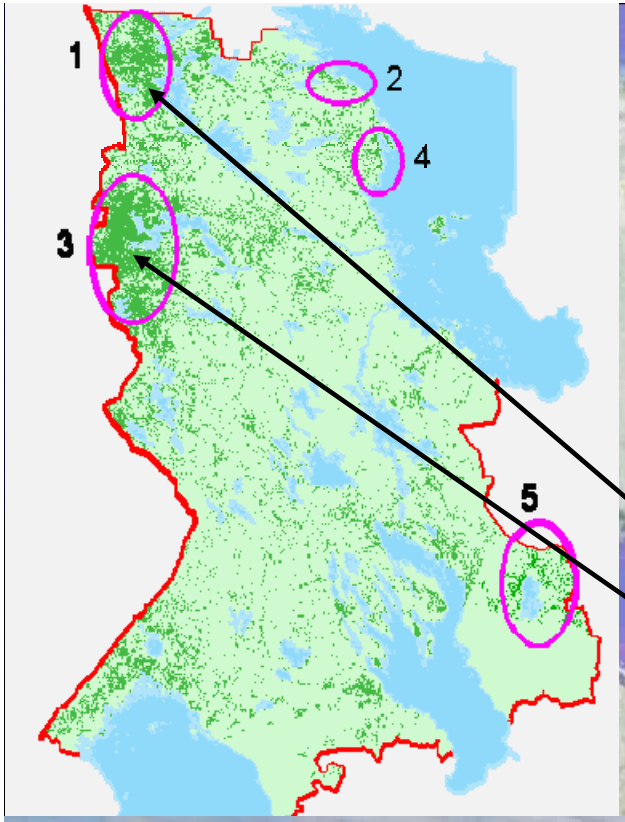
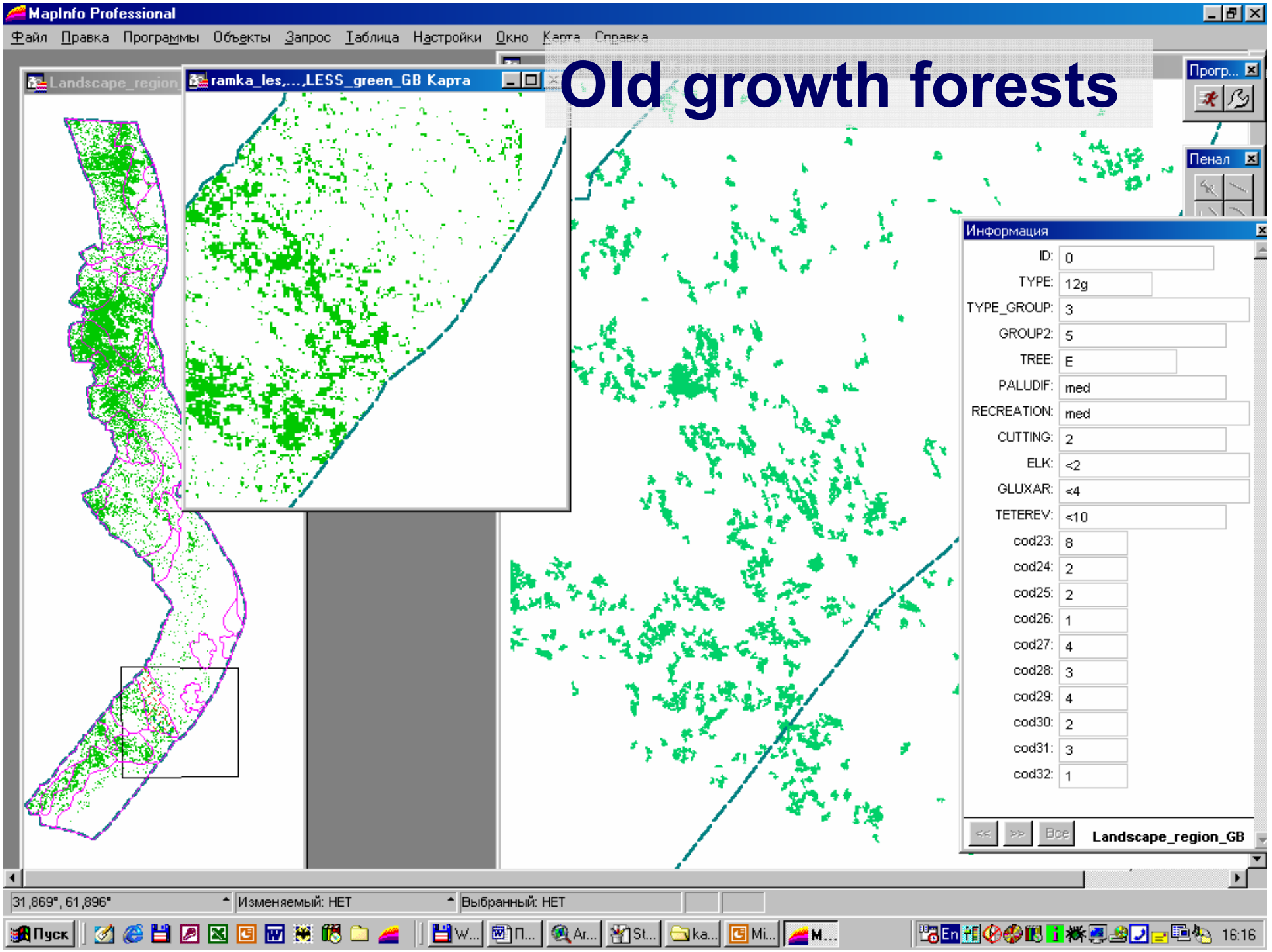


GIS on aquatic ecosystems of Karelia was created by Northern Water Problems Institute



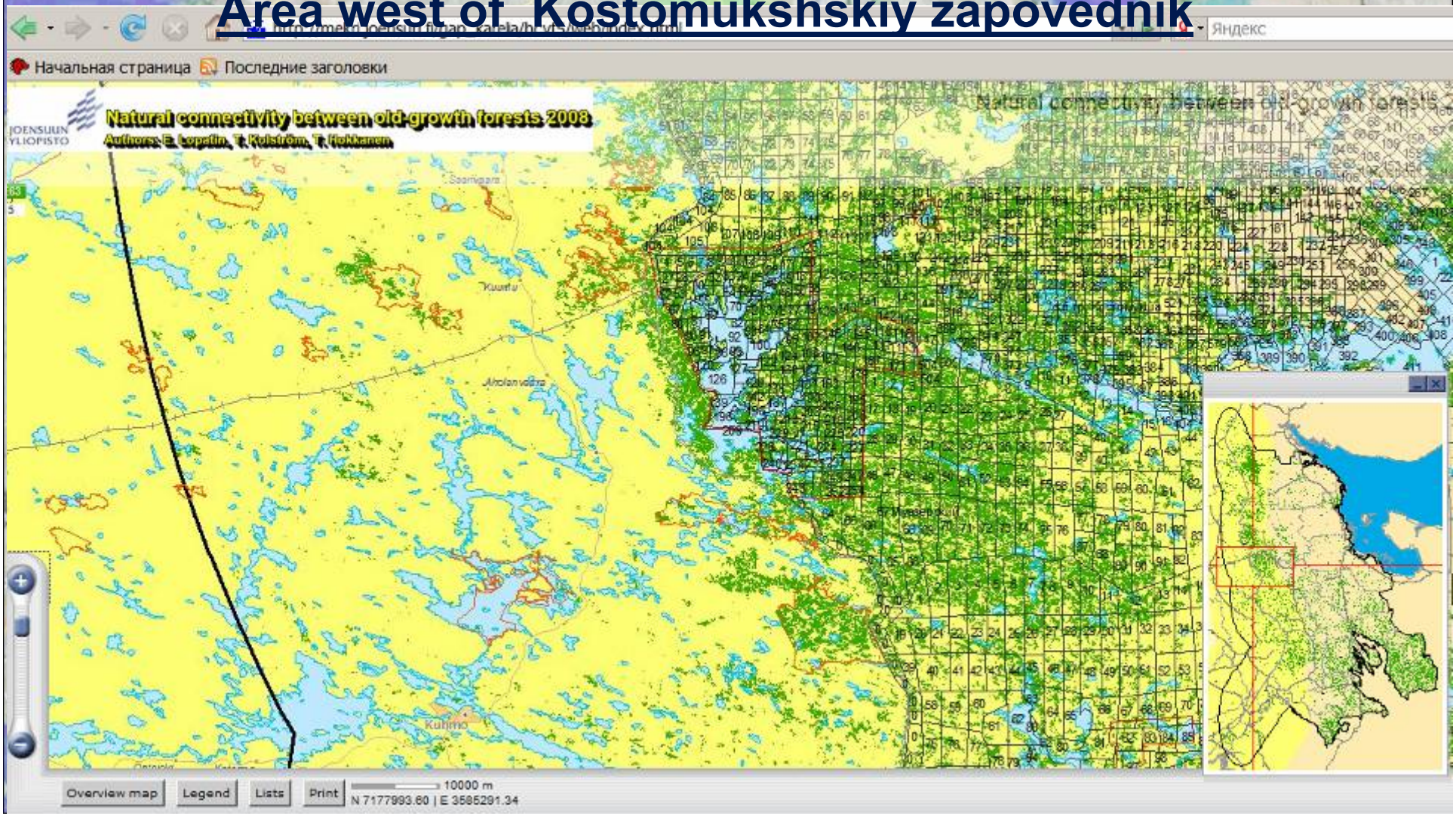
Stability of terrestrial ecosystems (primeval forests, mires, species diversity) in the context of climate change

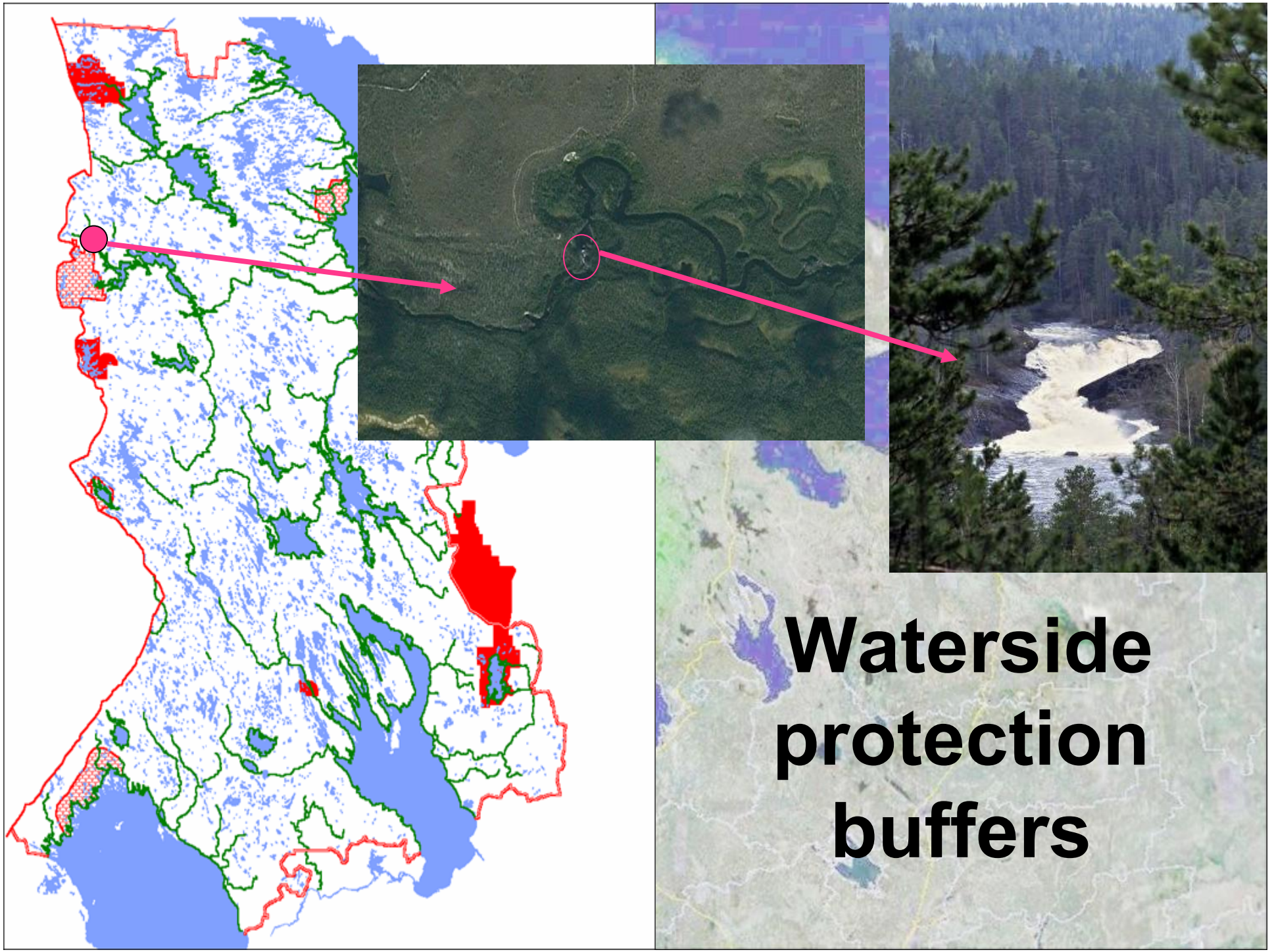
The largest woodlands with natural communities

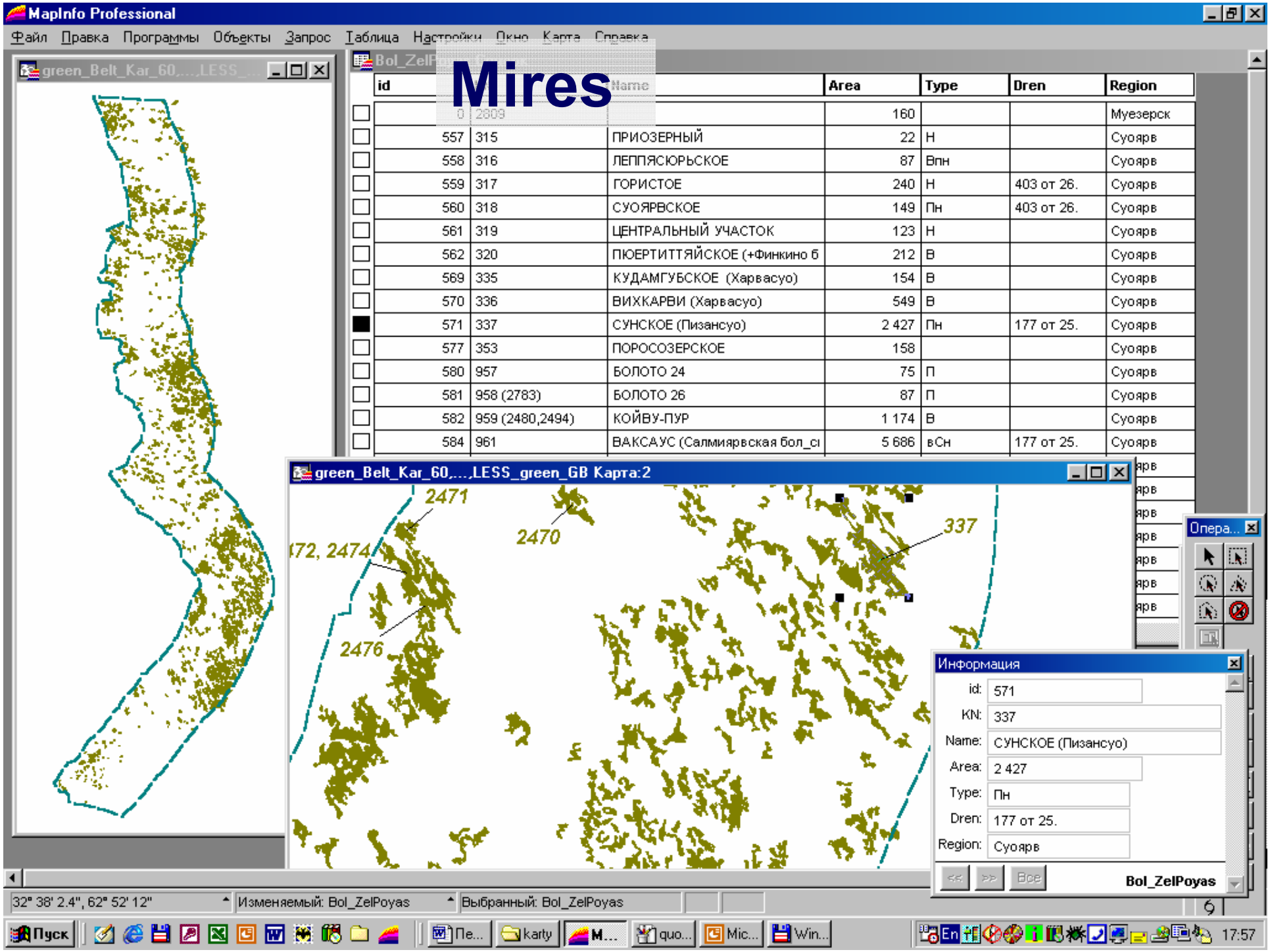

MapInfo Professional
Файл Правка Программы Объекты Запрос Таблица Настройки Окно Карта Справка
Old growth forests
Landscape_region
ramka_les,...,LESS_green_GB Карта
Прогр...
Пенал
Информация
ID: 0
TYPE: 12g
TYPE_GROUP: 3
GROUP2: 5
TREE: E
PALUDIF: med
RECREATION: med
CUTTING: 2
ELK: <2
GLUXAR: <4
TETEREV: <10
cod23: 8
cod24: 2
cod25: 2
cod26: 1
cod27: 4
cod28: 3
cod29: 4
cod30: 2
cod31: 3
cod32: 1
<< >> Все
Landscape_region_GB
31,869°, 61,896°
Изменяемый: НЕТ
Выбранный: НЕТ
Пуск
16:16

Joensuu university studies of forest cross-border connectivity

Area west of Kostomukshskiy zapovednik




Waterside
protection
buffers


MapInfo Professional
Файл Правка Программы Объекты Запрос Таблица Настройки Окно Карта Справка
Mires
green_Belt_Kar_60,...,LESS_...
Bol_ZelP...
id
Name
Area
Type
Dren
Region
0 2809
160 Муезерск
557 315 ПРИОЗЕРНЫЙ 22 Н Суоярв
558 316 ЛЕППЯСЮРЬСКОЕ 87 Впн Суоярв
559 317 ГОРИСТОЕ 240 Н 403 от 26. Суоярв
560 318 СУОЯРВСКОЕ 149 Пн 403 от 26. Суоярв
561 319 ЦЕНТРАЛЬНЫЙ УЧАСТОК 123 Н Суоярв
562 320 ПЮЕРТИТТЯЙСКОЕ (+Финкино б 212 В Суоярв
569 335 КУДАМГУБСКОЕ (Харвасуо) 154 В Суоярв
570 336 ВИХКАРВИ (Харвасуо) 549 В Суоярв
571 337 СУНСКОЕ (Пизансуо) 2 427 Пн 177 от 25. Суоярв
577 353 ПОРОСОЗЕРСКОЕ 158 Суоярв
580 957 БОЛОТО 24 75 П Суоярв
581 958 (2783) БОЛОТО 26 87 П Суоярв
582 959 (2480,2494) КОЙВУ-ПУР 1 174 В Суоярв
584 961 ВАКСАУС (Салмиярвская бол_сі 5 686 вСн 177 от 25. Суоярв
green_Belt_Kar_60,...,LESS_green_GB Карта:2
2471
2470
337
72, 2474
2476
Опера...
Информация
id: 571
KN: 337
Name: СУНСКОЕ (Пизансуо)
Area: 2 427
Type: Пн
Dren: 177 от 25.
Region: Суоярв
<< >> Все
Bol_ZelPoyas
32° 38' 2.4", 62° 52' 12"
Изменяемый: Bol_ZelPoyas
Выбранный: Bol_ZelPoyas
Пуск
Пе...
karty
M...
quo...
Mic...
Win...
17:57

Academy of Finland "Russia in Flux"

- project "Impact of forestry on taiga ecosystems, species diversity and distribution in North-West Russia"

Russian-Finnish workshop "Impact of forestry on taiga ecosystems, species diversity and distribution in North-West Russia" was held in Helsinki in 2007. The results of the project were discussed.

Projects for ecotourism development GBF territory

TACIS projects:

- "Development of Suojärvi District" (1998-2000; 2004-2006)
  http://suotacis.krc.karelia.ru/
- "Nature-based tourism as a Tool for Muezersky District Development" (2002-2004)

http://muetacis.krc.karelia.ru/

The Master Plan of siting tourism objects and infrastructure in Karelia through year 2025 distinguishes 12 tourism zones, of which nearly a half (5) fall in GBF territory

Identification of ethnocultural centres, historical and cultural monuments in GBF territory

Map of cultural sites

Study of the land use history, investigation of the effect of PA establishment on socio-economic development, detection of the areas most promising for cultural tourism development, identification of potential spheres of cross-border cooperation.

Public environmental awareness

- people get to understand that nature conservation can go in line with economic development and preservation of national and cultural traditions

15 years of large-scope scientific research

- Extensive material on GBF nature, history of settlement and land use in the territory, social & economic problems of communities worked out in 80 projects has been amassed and summarized in more than 800 publications

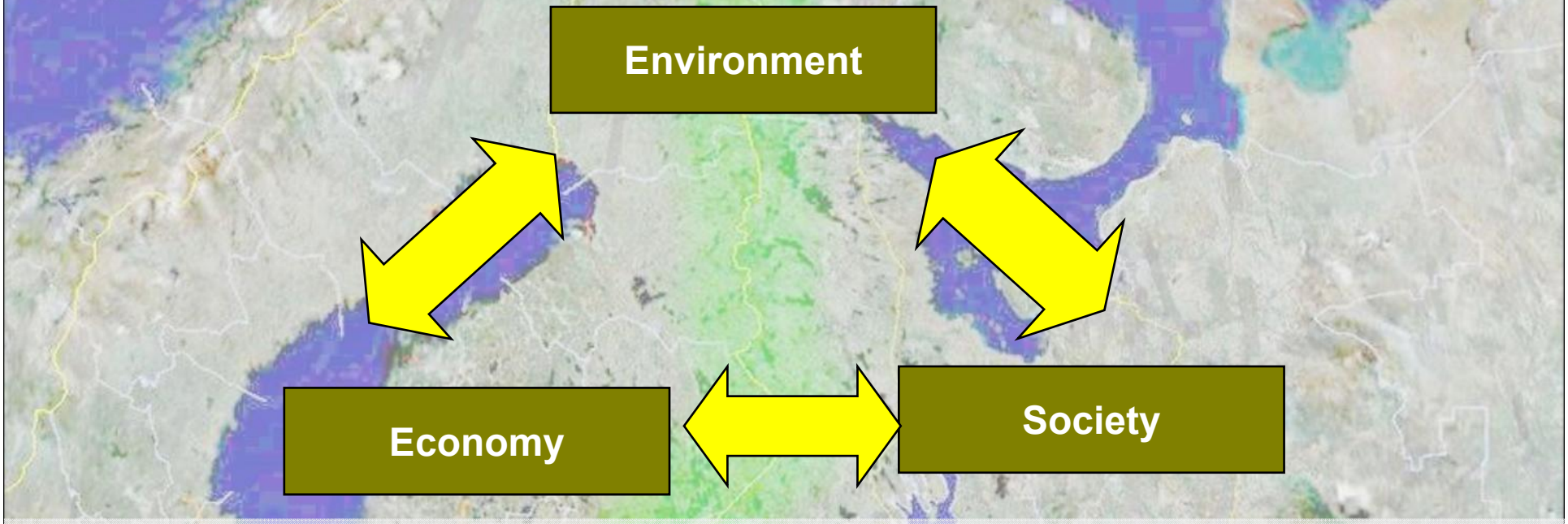
Integration of data resources

- Integration of data resources started in KarRC of RAS in 2009 on the base of supercomputer and GIS Centre under the special grant of RFBR.
- GBF is one of the main topics of this work.

WEB-resources
(http://green-belt.krc.karelia.ru)

Green Belt of Fennoscandia seminar in Petrozavodsk (June, 2008)

Programme objective



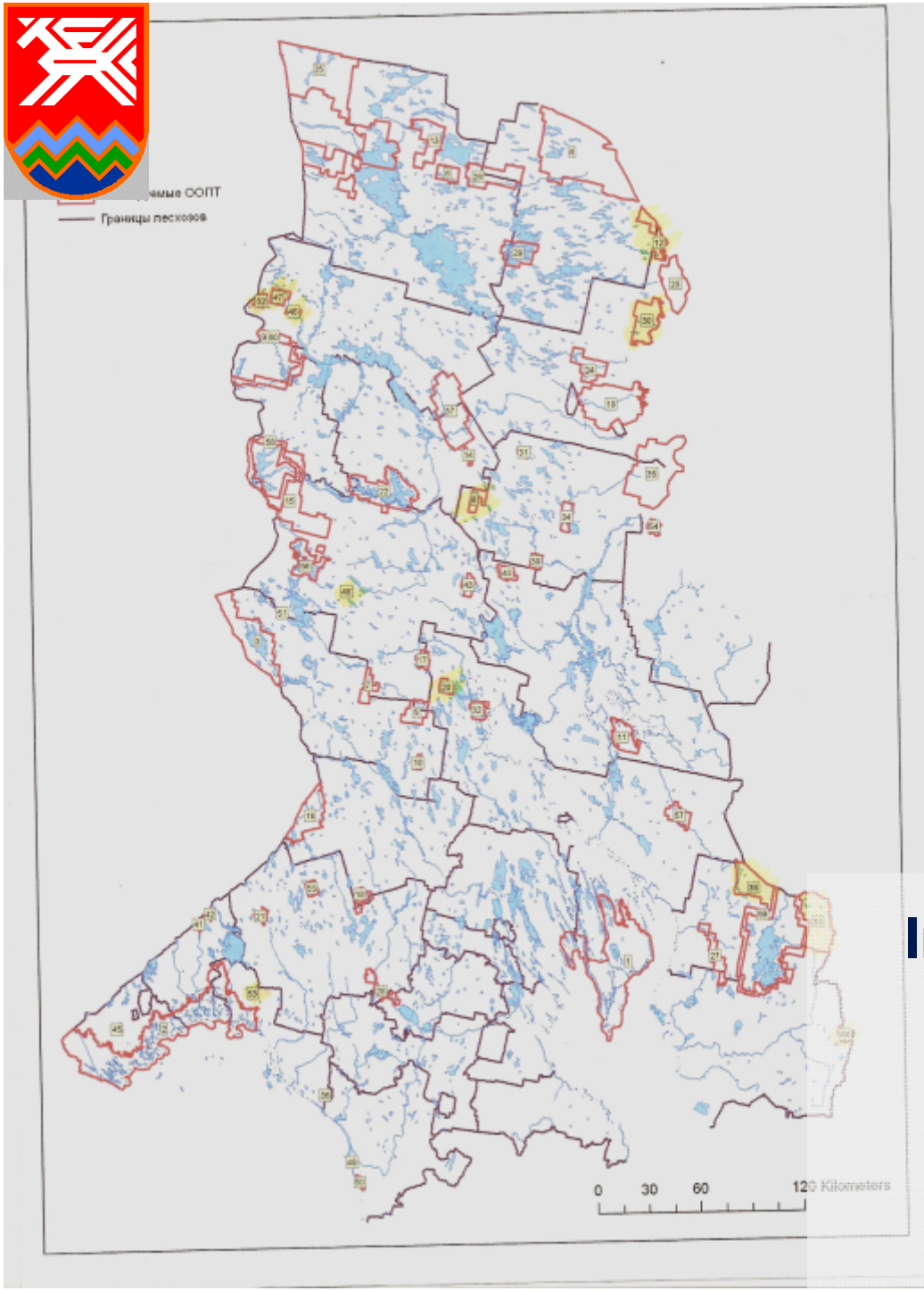
Research into natural complexes on both sides of the Russian-Finnish border, and preparation of scientific substantiation for organizing integral environmental-economic space in order to conserve unique northern nature and develop the territories with regard to historical and cultural features of the peoples living there

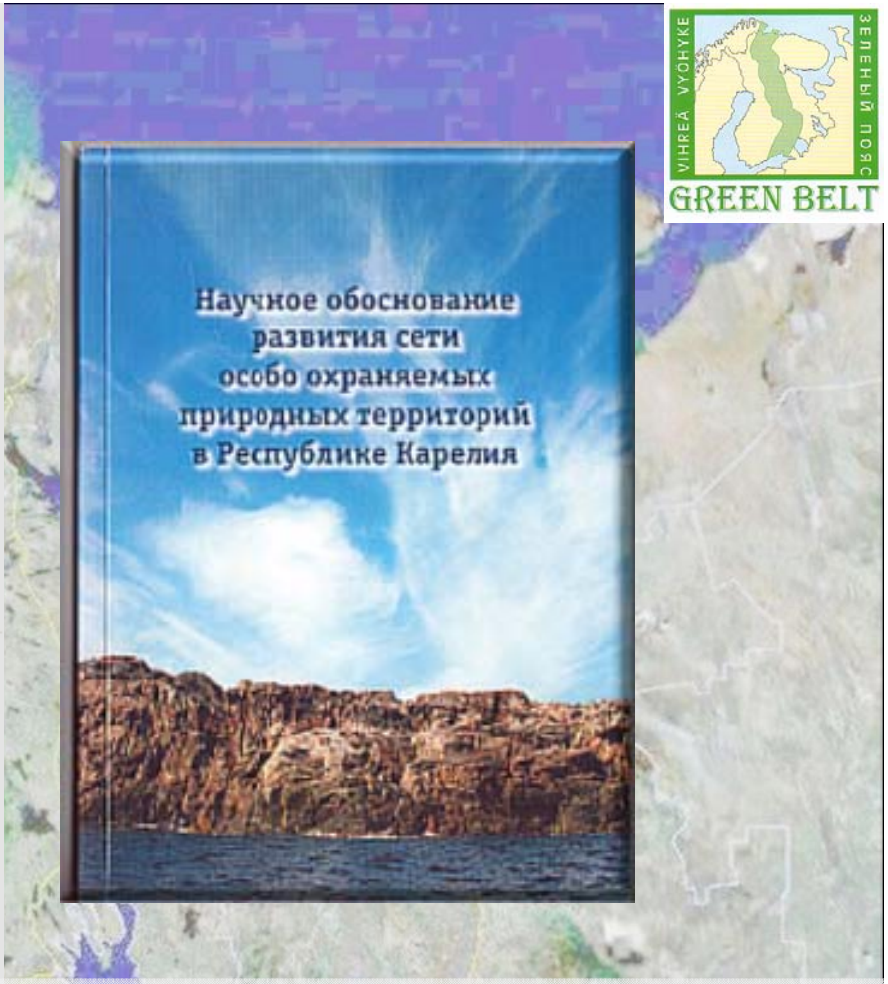
Russian-Finnish project «Green Belt of Fennoscandia» (2009 – 2010)

One of the first steps of realization seminar decisions was organizing of Russian-Finnish project “Developing of the GBF” (2009-2010).

Programme final beneficiaries

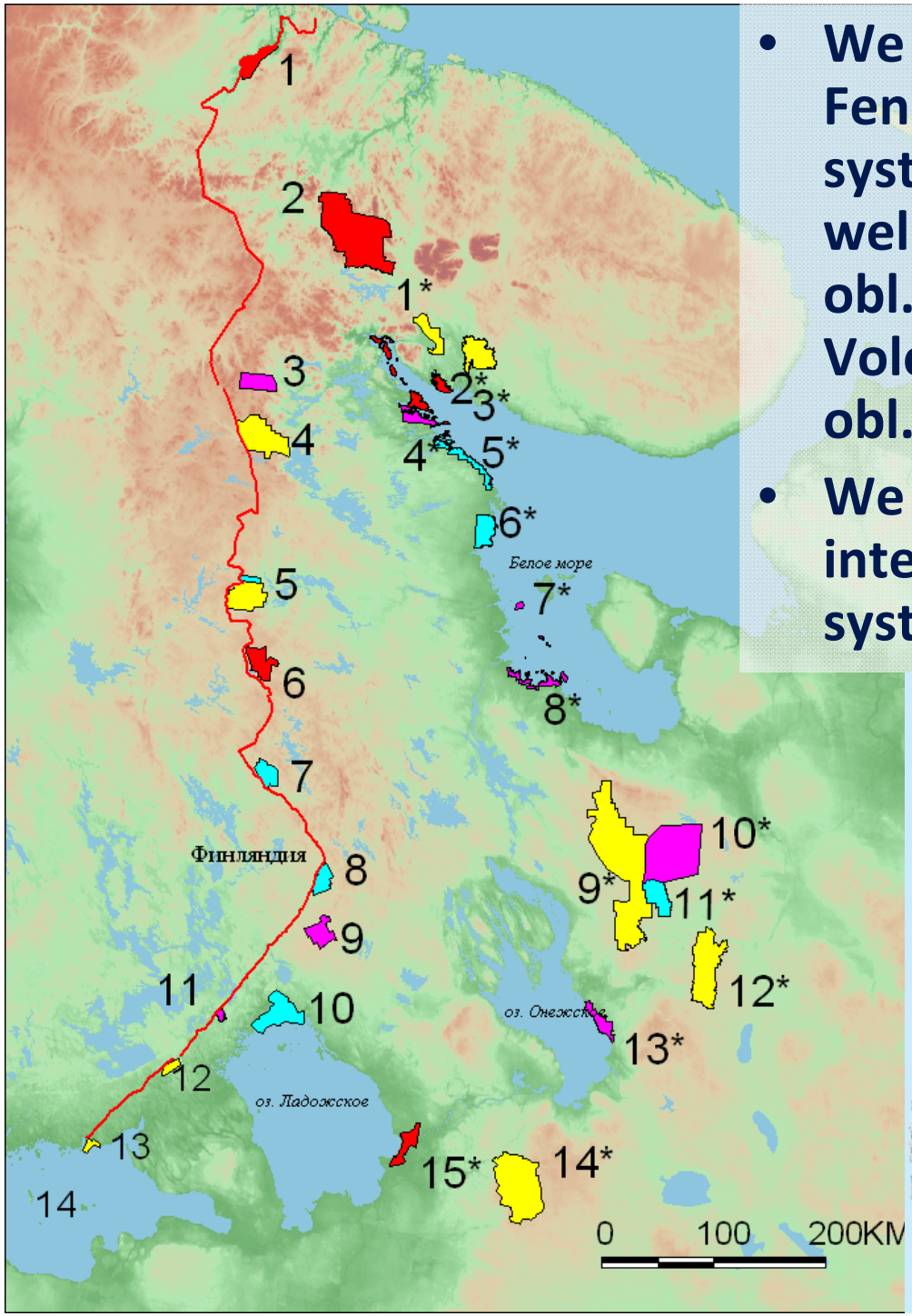
- Institutions and organizations:
  - Administrations of border districts, towns and villages
  - Scientific organizations
  - National parks and other PAs
  - Educational institutions
  - Tourist firms
- NGOs
  - Environmental
  - Ethnographic
  - Local lore
- Local people
  - Educators and students
  - Fishermen and hunters
- Tourists





VIHREÄ VYÖHYKE
ЗЕЛЕНЫЙ ПОЯС
GREEN BELT

In 2008, the Feasibility Study for the PA network development in Republic of Karelia was prepared (leader A. Gromtsev)



- We do not consider the Green Belt of Fennoscandia separately from the PA systems of Karelia and Finland as well as systems of Arkhangelskaia obl., Murmanskaia obl., Vologodskaia obl., Leningradskaia obl. and St.-Petersburg.
- We believe that interstate and interregional continuity of PA systems very important

Thank you!

VIHREÄ VYÖHYKE
ЗЕЛЕНЫЙ ПОЯС
GREEN BELT