

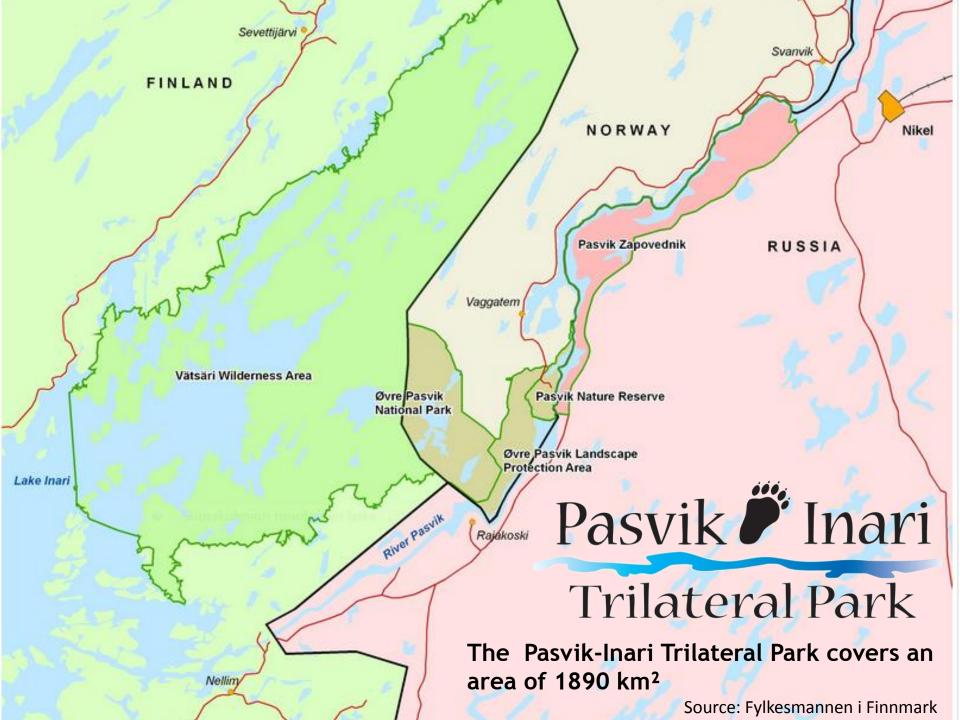
## Trilateral Park

Monitoring and managing Brown Bears and Visitors...

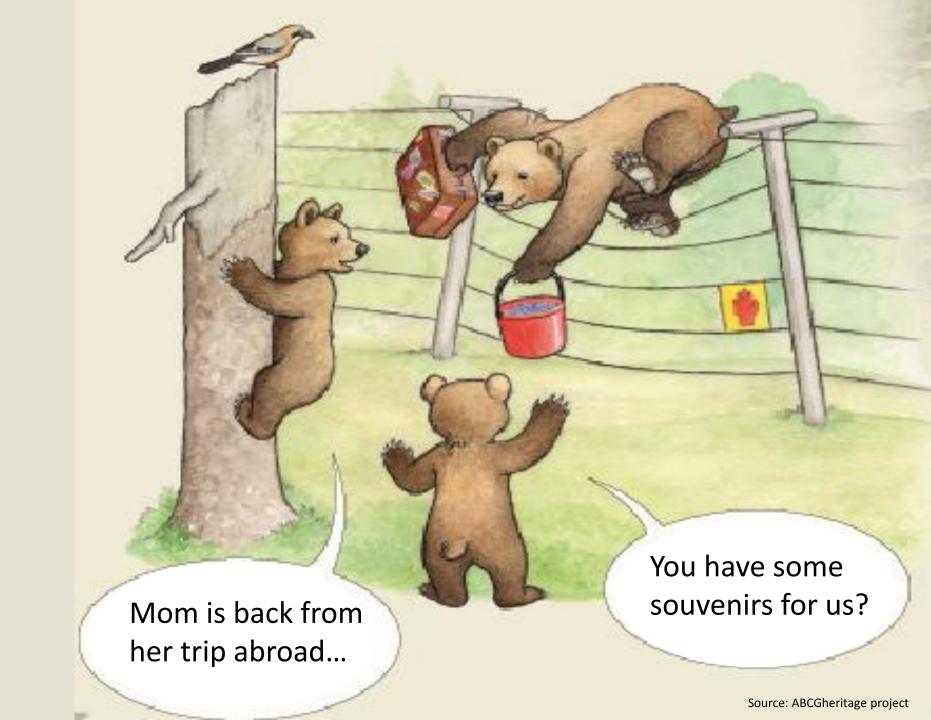


Riina Tervo - Parks and Wildlife, Finland
Tiia Kalske - County Governor of Finnmark, Norway
Natalia Polikarpova - Pasvik Zapovednik, Russia

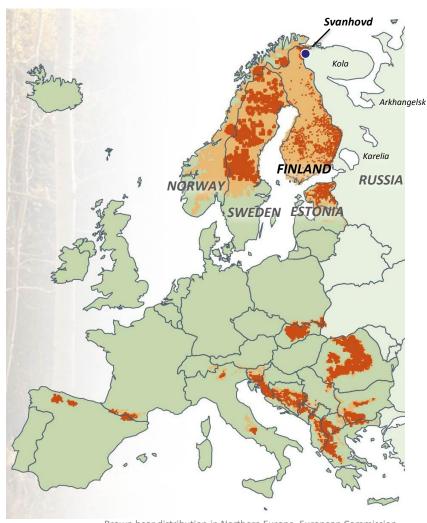








## The brown bear in northern europe



Brown bear distribution in Northern Europe. European Commission.

### Population size estimations

Norway: [minimum] ~150

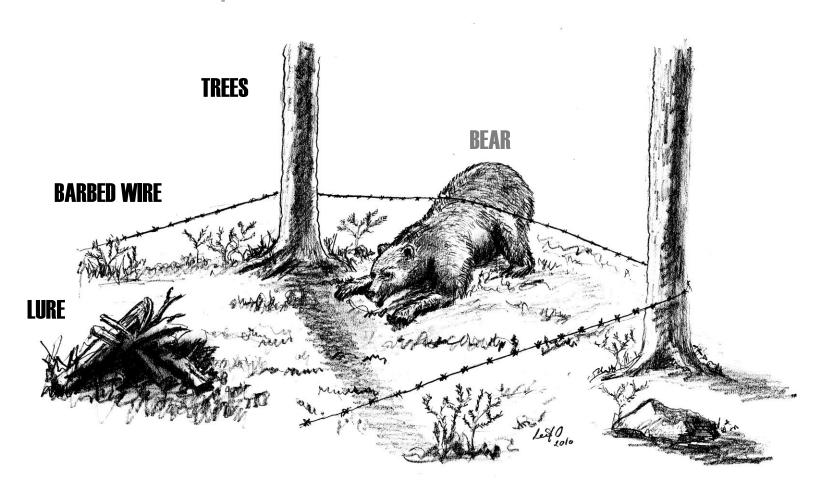
Sweden: ~2,800

Finland: ~1,700

Russia: ~130,000

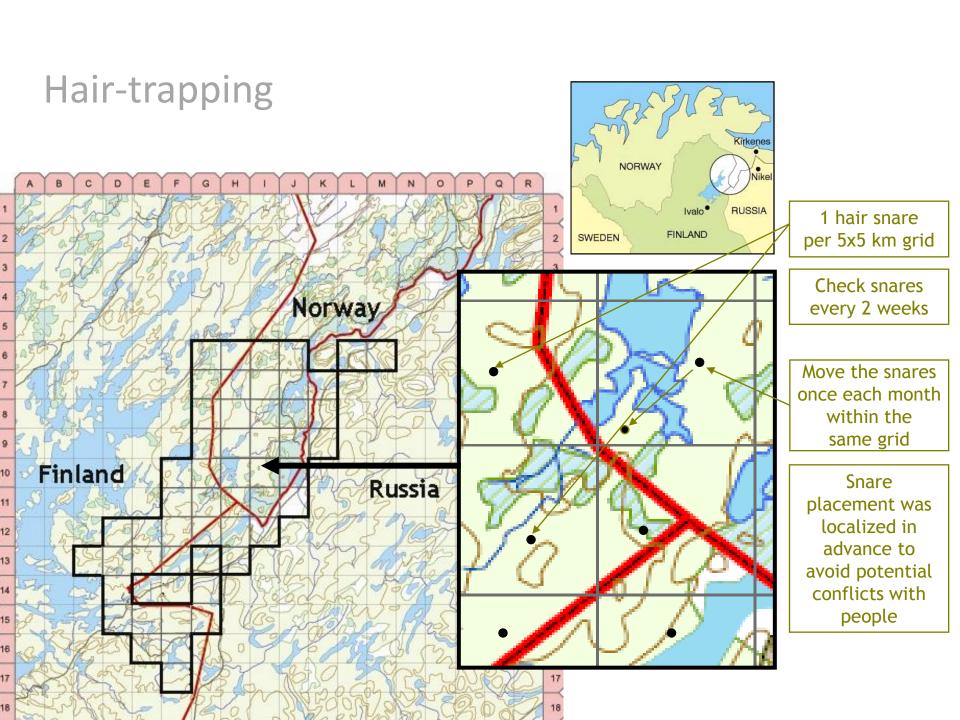
Estonia: ~700

## Hair-snares to pluck bear hair



Drawing by Leif Ollila

Input from: Alexander Kopatz – NIBIO Svanhovd, Norway



# Monitoring of the Pasvik-Inari-Pechenga brown bear population in 2015 using hair-trapping

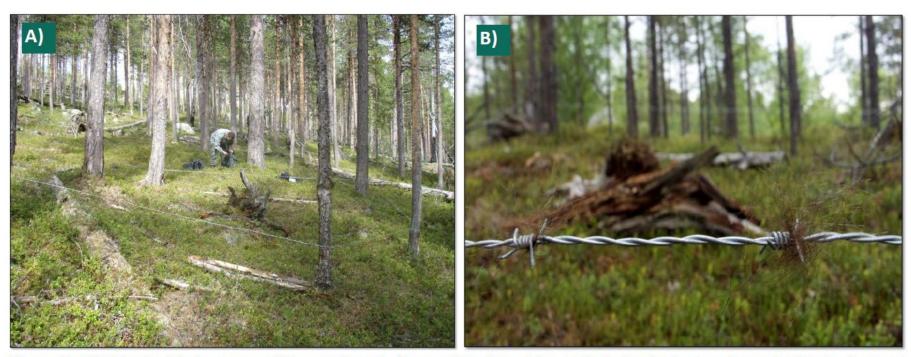
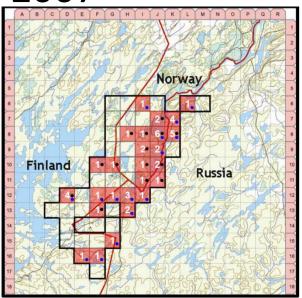


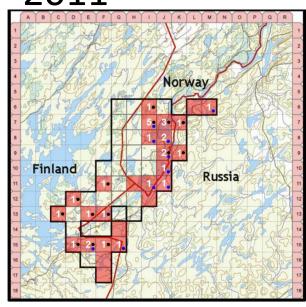
Figure 2: A) A typical hair snare with scent lure in the center ringed by a single barbed wire strung between trees at 40-50 cm from the ground. B) Hairsample on a wire. Photos: Sari Magga (left), Alexander Kopatz (right).

# Monitoring of the Pasvik-Inari-Pechenga brown bear population in 2015 using hair-trapping

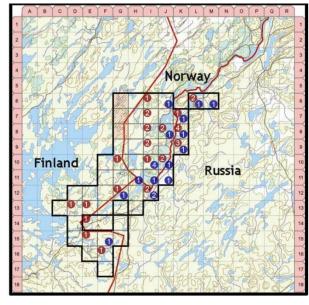
2007



2011



2015



196 samples collected
26 of 56 grids showed activity
24 bears identified

(10 females, 14 males)

11 new identified, 13 known

88 samples collected
27 of 56 grids showed activity
20 bears identified

(12 females, 8 males)

4 new identified, 16 known

209 samples collected
25 of 56 grids showed activity
26 bears identified
(17 females, 9 males)

13 new identified, 13 known

## Remote wildlife cameras

### No harm to wildlife was documented or observed







All footage from 2015 has been compiled and can be viewed here: <a href="http://vimeo.com/144482693">http://vimeo.com/144482693</a>

# Monitoring of the Pasvik-Inari-Pechenga brown bear population in 2015 using hair-trapping

### **Conclusions**

- Hair-traps have shown their power in detecting bear abundance and individuals.
- Compared to 2007 and 2011, the total number of identified individuals in 2015 increased, respectively with 3 and 7 individuals.
- Seven (35%) individuals, detected in 2011, were recaptured in 2015. Four (16.7%) bears, detected in 2007, were recaptured in 2015.
- Two individuals were detected in two countries, and one individual were detected in grids in all three countries.
- The higher number of samples and detected brown bears in 2015 may be caused by more bear activity within the study area, compared to 2007 and 2011.
- A total of 13 new bears were identified in 2015 as compared to 4 in 2011.
- Hair-trapping can lead to a substantial increase in the number of detected bears in the area.
- As is previous studies, no harm to wildlife was documented or observed.
- Sample collection during summer period.
- Unique, prestigious pioneer project and study in management and research.











Brown Bear Center at NIBIO Svanhovd, Norway

## **Trilateral Visitor Monitoring**

| Core area                                 | Area /<br>Sight   | Country | Way of measuring                | 2014      | 2015      |
|---|-------------------|---------|---------------------------------|-----------|-----------|
| Pasvik<br>zapovednik                      | NPA               | RUS     | counting (permits for entrance) | 895       | 580       |
| Øvre-Pasvik NP                            | NPA               | NOR     | estimate,<br>*counter           | c. 1500   | 1956*     |
| Pasvik NR                                 | NPA               | NOR     | estimate                        | c. 500    | c. 500    |
| Øvre-Pasvik LPA                           | NPA               | NOR     | estimate                        | c. 1500   | > 1500    |
| Vätsäri<br>wilderness area                | NPA               | FIN     | estimate                        | 7 000     | 7 000     |
| <b>Together NPAs</b>                      |                   |         |                                 | c. 11 395 | c. 11 536 |
| Rajakoski nature school                   | Visitor centre    | RUS     | counting                        | 580       | 370       |
| Svanhovd info centre, NIBIO               | Visitor centre    | NOR     | counter                         | 6 950     | 8 961     |
| Sámi museum<br>and nature<br>centre Siida | Visitor<br>centre | FIN     | counter                         | 98 470    | 113 474   |
| Together centres                          |                   |         |                                 | 106 000   | 122 805   |
| Piilola hiking<br>trail                   | Sight             | NOR-FIN | counter                         | 381       | 160       |





Photos: Gunnar Reinholdtsen; Riina Tervo, Metsähallitus

## Main infrastructure for visitors

| Protected area               | Main infrastructure                                      |  |  |
|------------------------------|--|--|--|
| Vätsäri Wilderness Area (FI) | 35 km of marked hiking trails, Piilola trail;            |  |  |
|                              | 3 open wilderness cabins and one rental hut              |  |  |
|                              | Siida – Visitors Centre in Inari                         |  |  |
| Øvre Pasvik National Park    | 12 km of marked hiking trails, Piilola trail; ~10 km of  |  |  |
| (NO)                         | skiing routs and 2 open wilderness cabins.               |  |  |
|                              | Øvre Pasvik National park Centre in Svanvik              |  |  |
| Øvre Pasvik Landscape        | 5 km of marked hiking trails, ~5 km of skiing routs.     |  |  |
| Protection Area (NO)         |  |  |  |
| Pasvik Nature Reserve (NO)   | 2 km of marked hiking trail to bird watching hide and an |  |  |
|                              | old bears den  |  |  |
| Pasvik State Nature          | Varlam Island nature and culture site                    |  |  |
| Reserve (RUS)                | Visitor-centre –ecological school in Rajakoski           |  |  |
|                              | Coming – Visitors Centre in Nikel city                   |  |  |

#### <del>▼</del> PIILOLAN POLKU

Piliolan retkipolitu kulkee alkumatkasta vanhaa talojen välistä kulkureittiä Nammijärveile ja sieltä edelleen Piliolan rajanyiltyspalkaile. Retkipolku jatkuu Norjan puolelia Elienkolan autiotuvan kautta Sortbrystjernin pysäköintipalkaile. Retitin kokonaispituus on 35 km, josta Suomen puolen osuus on 24 km. Retiti on Suomen puolelia merkitty siniseksi maaistulin puutenkein. Maasto polun varreila on kaunista mäntymetsää ja vaaramaisemaa, jonka iomassa on metsäisiä soita, jokia la iärviä.

Retkeilijöiden käytössä on Suomen puolella Piliolan autiotupa Nammijärvellä sekä Nuottamajärven laavu. Kessijärvellä heti aikumatkasta on Stora Enson omistama avoin tupa, jota myös voidaan käyttää taukopaikkana. Norjan puolella 200 metriä rajan jäikeen on Piliolanportin autiotupa ja viisi kilometriä myöhemmin Eilenkolan autiotupa.

Schengenin sopimuksen perusteella Suomen ja Norjan välisen rajan voi ylittää Piliolan polkua pitkin ellei mukana ole tuliattivaa tavaraa. Vapaa illiktuminen koskee myös kolmansien maiden kansalaisia, loilla on viisumi tai oleskelulupa johonkin Schengen-maahan.



#### PIILOLA PÄÄLGIS

Pilota vandárdempäälgis jotá algámäädhi puáris jotteemkiäinu táálui kooská Njammijáávrán já tobboen ain Pilota rájirasájítítímesajan. Vandárdempäälgis juátkoo Taszábel Elestohpu ávdintuve pehi Sortabealluoppal sajostitíemsajan. Kiáinu oleskukkodáh li 35 km mast Suomábelh merkkejum čuovjádin máálájum muorástuálpuiguin já Taszábelh muoráshi hiäggájejes duovjádin máálájum muoráshahájguin, Mocci pálgá pallast li mudis pochyevdí já várienádáh, moi kooskást láá jeegíh, juuvah já jáávrih.

Vandárdeljei klávtust Suomábeln II Pillola ávdintupe Njammíjáávrist sehe Koldemjáávri atárdum tujástálámsaje, Tálján algámáláthist Kesjáávrist Ji Stora Enso omástem ávus tupe, mon puáhtá kevtőd vuolgástempudássajeen. Tazáábeln 200 meetterid rááji maga III Pillolaporttá ávdintupe já vittá kilomeetter magelásá Ellestohpu ávdintupe.

Schengen sopāmuš vuádujú puáhtá Suomā jā Taažā koskāsāš rāšji rastaldītid Pillola pālgā jodedin ja mieldā ij lah tullamvārsāš tāšvir. Rijjā lihādem kuāškā meiddei kuālmādij enāmij aslmugjesānijd, kiāin lii viisum tāj orostālāmlope monni Schengen-enāmān.



#### PIILOLA-STIEN

Første del av Plilola-stien går langs den gamle gårdsvelen til Nammijlärvi og deretter videre til den finsk-norske grensa ved Pillola. Stien fortsetter til Eilenkola på norsk side og ender ved Sortbrystjem. Stien har en total lengde på 35 km hvorav 24 km er i Finland. Stien er merket på finsk side med blåmalte trestolper og på norsk side med blåmalte tresklit opphengt I trær. Stien går i lett kupert furuskogsjandskap, med innslag av myr, innsjeger og elver.

Turgåerne kan på fink side bruke ødemarkskola Pillola ved Nammijärvi og gapahuken ved Nuottamajärvi. Ved Kessijärvi i begynnelsen av stlen ligger en åpen hytte, som eles av Stora Enso. Denne kan brukes som rasteplass. På norsk side, 200 meter, fra grensa ligger Pillolahytta (Pillolaporten), og fem kilometer senere Ellenkola ved Ellenvatnet.

Schengen-avtalen tillater grensekryssing mellom Finland og Norge langs Pillola-stien, dersom man like har med seg tolipliktige varer. Dette omfatter også personer som har gyldig visum eller oppholdstillateise I et Schengen-land.



#### PIILOLA TRAIL

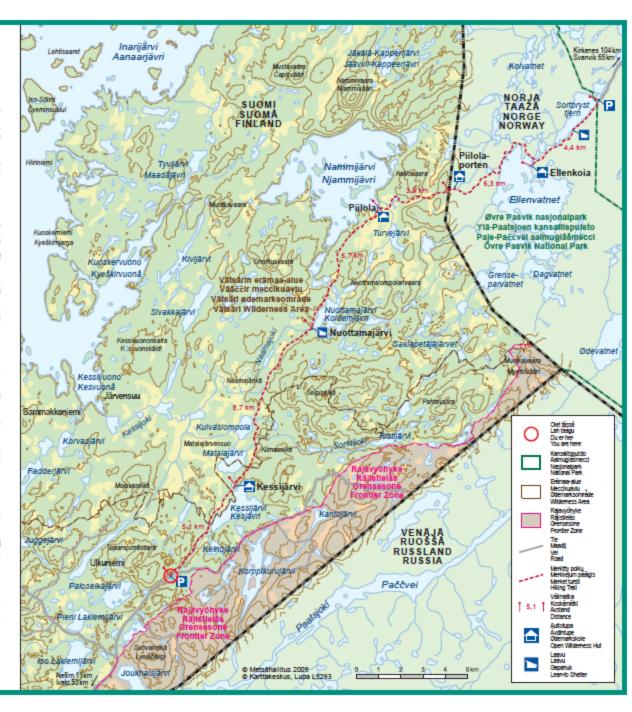
The Pillola Hiking Trail follows at first the old route between houses to Lake Nammijärvi and, from there, it continues to the Pillola border crossing point. After that, the trail goes on in Nonway to the Ellenkola Wildemess Hut and then to the parking lot of Sortbrystjern, where it ends. The total length of the trail is 38 km, of which 24 km are situated in Pinland. In Finland, the trail has been marked with blue wood posts and, in Norway, with blue wooden marks that hang from trees. The trail runs in beautiful pine forests and hill country, in the midst of swamps, fivers and lakes.

On the Finnish side, the facilities available for the hilters include the Pillola Wilderness Hut on Lake Nammijärvi and a maintained lean-to shelter on Lake Nuottamajärvi. On the first stretch of the trail, by Lake Kessijärvi, there is an open hut owned by the company Stora Enso, which can also be used by hilters for a stop. In Norway, there is the Pillolaportti Wilderness Hut 700 m after the border and the Eline Norway, there is the Pillolaportti Wilderness Hut 700 m after the border and the Eline Norway.

According to the Schengen Agreement, the border between Finland and Norway can be crossed by the Pillois Trail if the hiker does not carry along any goods that should be declared. Free movement also applies to citizens of third countries provided that they have a visa or a residence permit to a Schengen country.







## **Cross-border visitors survey**

## Websurvey 2017-

- Questionnaire
  - in four languages
  - delivered in paper, through qr-code and as e-mail in visitor centres, in the NPA's and in the tourism companies

#### Outcomes

- Basic information of the visitor: age, sex, place/country of origin
- Main reasons for the visit, spending, influence on health and well being
- Estimate on usage of money in the area in correspondence to length of the stay -> effect on local economy (Finland)
- Dissemination: information about Pasvik-Inari Trilateral Park is delivered!

