

Kuhu rändavad meie röövlinnud? Valikud isenditest liikideni

Ülo Väli



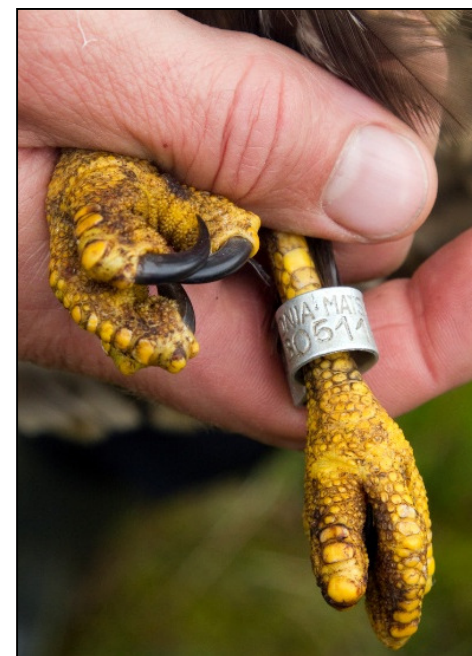
Röövlindude uurimine Eestis

- Arvukus ja selle muutused – alates 1960. aastatest
- Toitumine – 1970-ndatest
- Elupaigad – 1990-ndatest
- Demograafia
 - Sigimisedukus – 1990-ndatest
 - Suremus ja seda määravad tegurid – 2000-ndatest
 - Sugude suhe – 2010-ndatest

Aga ränne?

Röövlindude rände uurimine

- Jälgitud peamiselt läbirännet (alates 1960-ndatest)
- Meie lindude rändeteede ja sihtkohtade uurimine eeldab nende märgistamist ja taasleide
- Röövlindude rõngataasleide on suhteliselt vähe



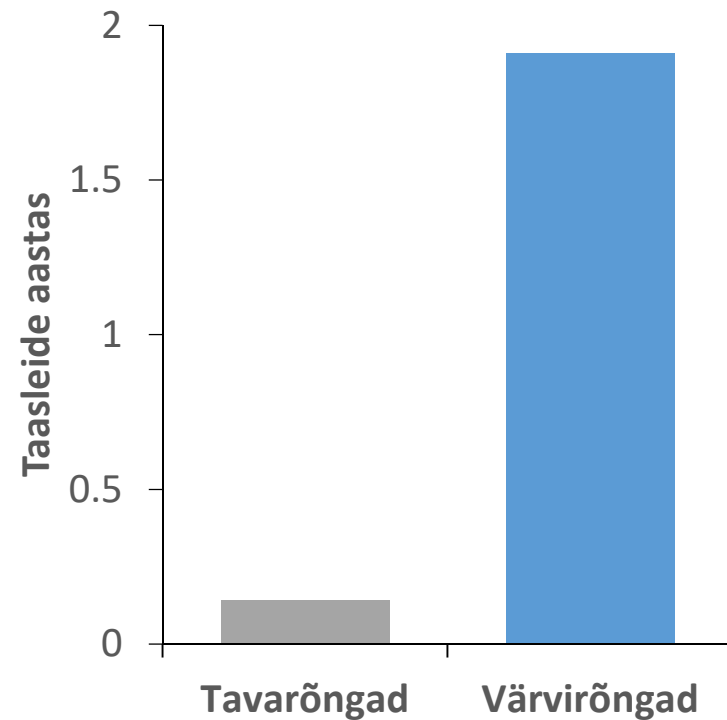
Röövlindude rände uurimine

- Uued meetodid - värvirõngad
 - Merikotkal alates 1984
 - Kaljukotkal alates 1998
 - Kalakotkal alates 2007



Röövlindude rände uurimine

- Uued meetodid
 - Konnakotkastel alates 2006
 - 7 taasleidu 1959 – 2005
 - 21 taasleidu 2006 – 2016



Röövlindude rände uurimine

- Uued meetodid – telemeetria



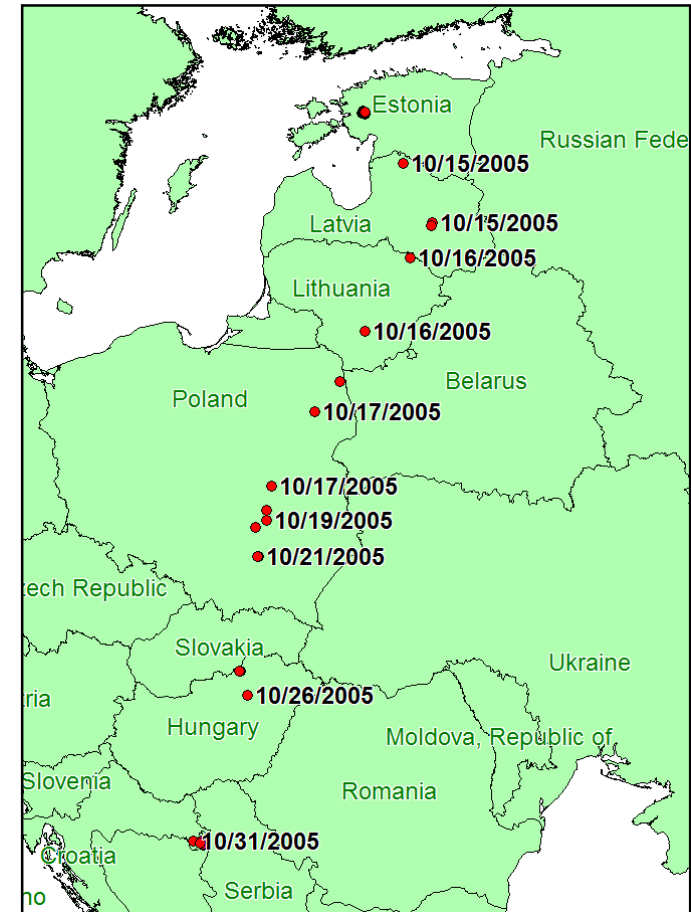
Urmas Sellis

Juku on seljakotiga varustatud 15. aug. 2005

CLOSE X

Röövlindude rände uurimine

- Uued meetodid – telemeetria



Küsimused isenditest liikideni

1. Kuidas varieeruvad rändesuunad asurkonna sees?
2. Kui suured on rännete erinevused asurkondade vahel?
3. Kas ränne aitab määrata alamliigilist kuuluvust?
4. Kas erinevad rändeteed aitavad hoida liike lahus?

1. Asurkonnasisene varieeruvus



Raul Melsas

Ringing & Migration, 2013
Vol. **28**, No. 2, 106–112, <http://dx.doi.org/10.1080/03078698.2013.869907>



Movements of the Goshawk in Estonia: an analysis of ring recoveries

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²Matsalu Ringing Centre, Environmental Board, Penijõe, 90305 Lihula, Läänemaa, Estonia

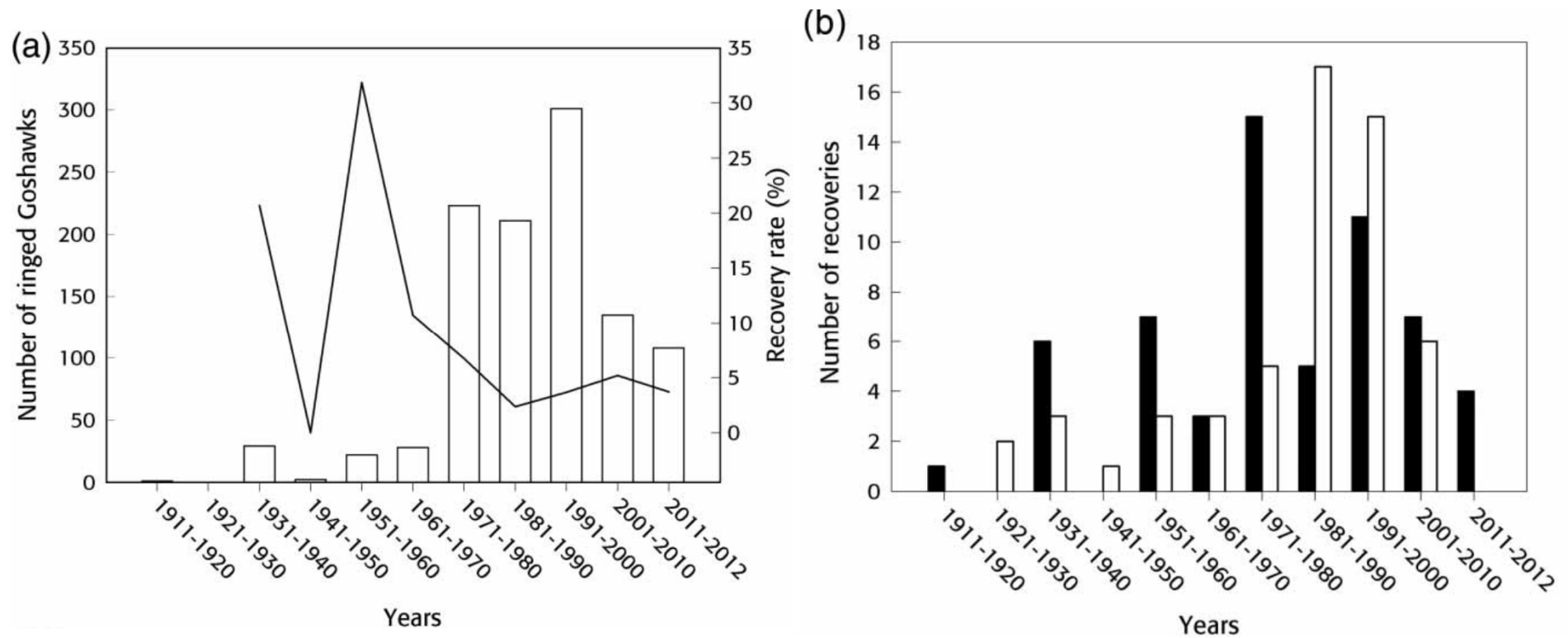


Figure 1. Changes in the number of ringed Goshawks in Estonia (open bars) and in the recovery rate of ringed birds (solid line; a), and temporal dynamics of Goshawk ring recoveries: birds ringed in Estonia (filled bars) and foreign birds recovered in Estonia (open bars; b).

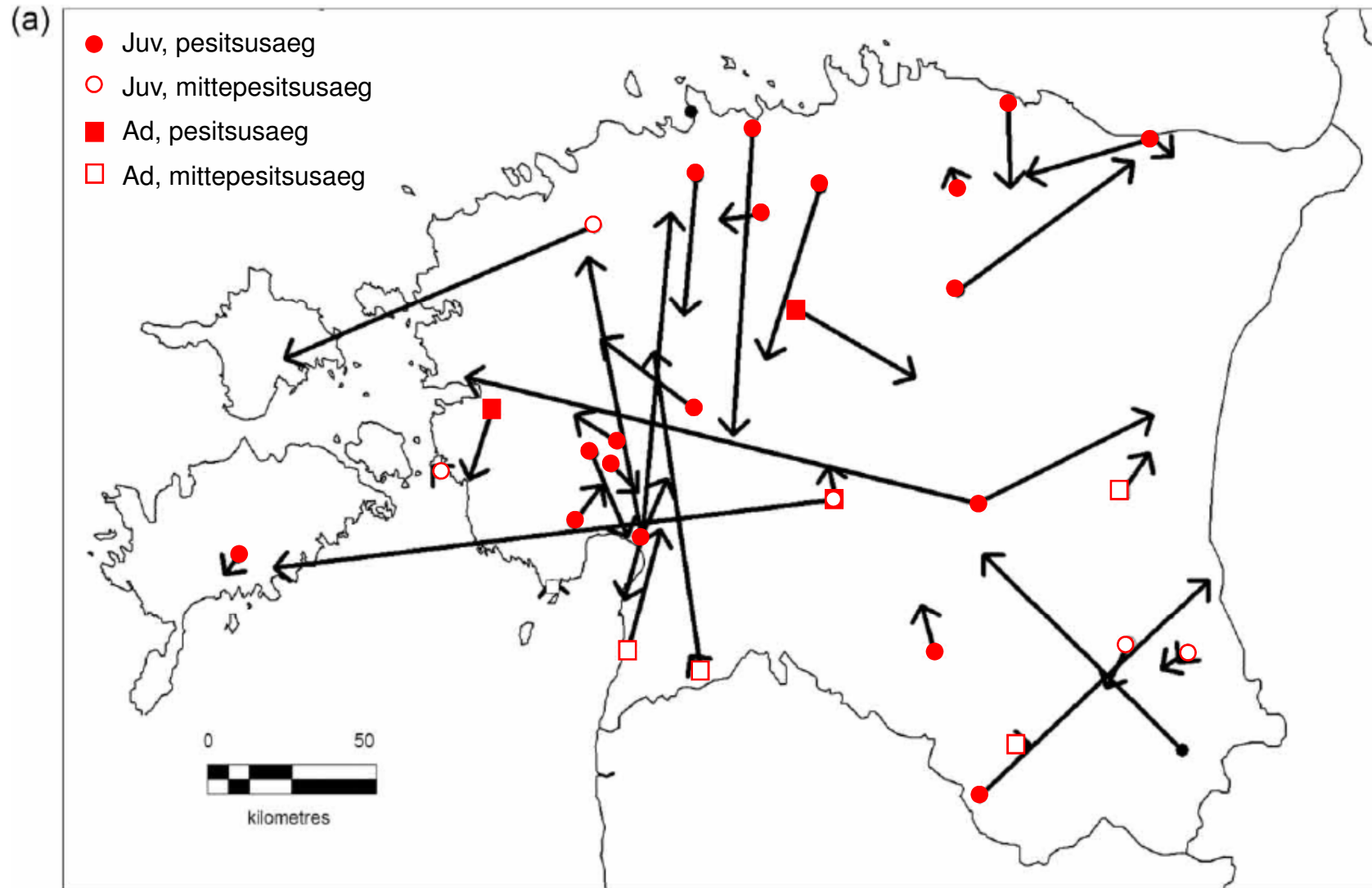


Figure 5. Movements of Goshawks ringed in Estonia: (a) recovered in Estonia, (b) recovered elsewhere. Ringing sites of 1 cy birds are denoted with circles and >1 cy with squares, filled symbols indicate ringing during the breeding season (March–July) and open symbols indicate ringing outside the breeding season.

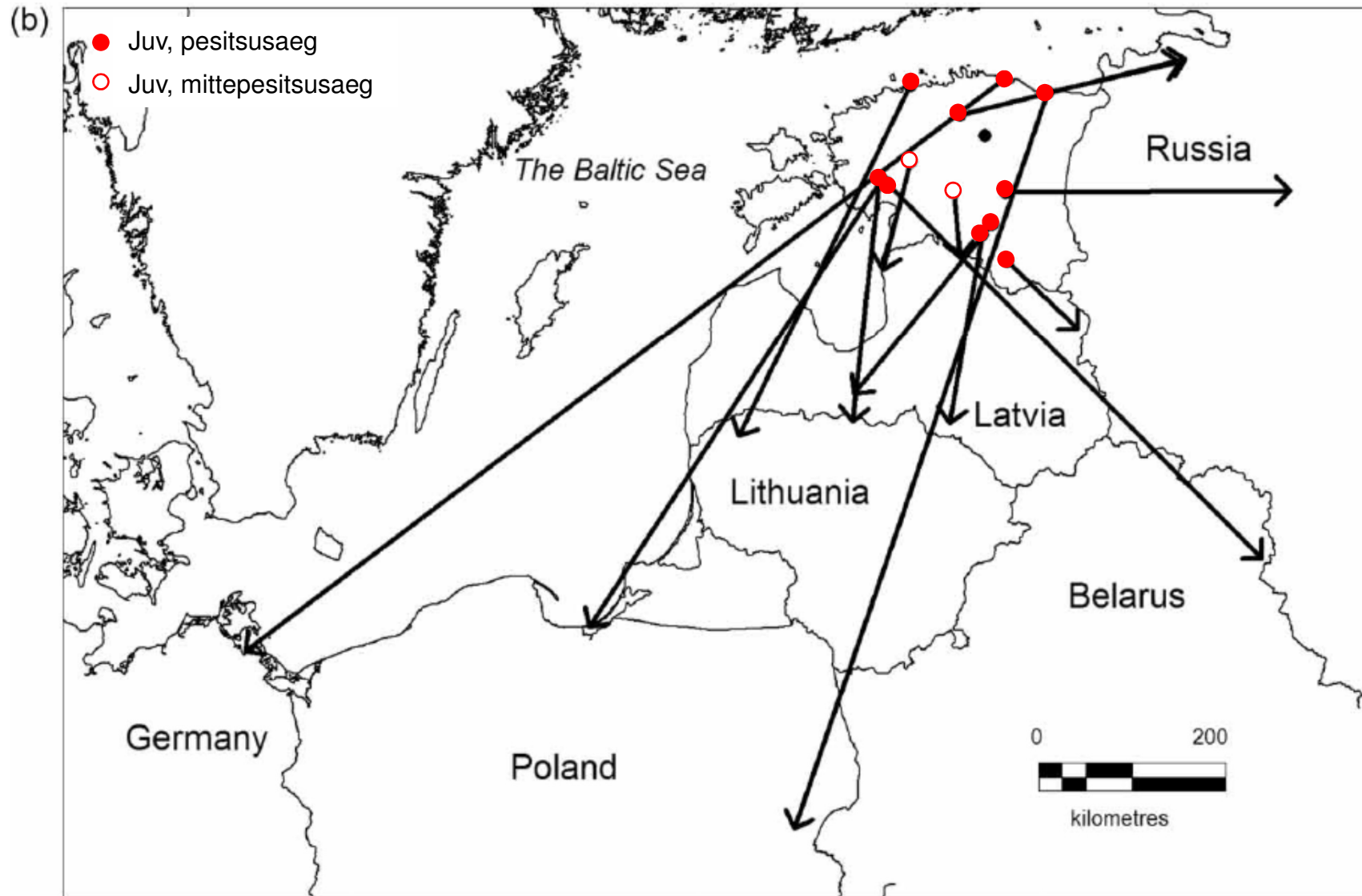


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Ülo Väli, Urmas Sellis, Olavi Vainu





Ringing & Migration, 2015
Vol. **30**, No. 2, 81–83, <http://dx.doi.org/10.1080/03078698.2015.1128246>

SHORT REPORT

Short-distance migration of Estonian Common Buzzards *Buteo buteo*

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²Matsalu Ringing Centre, Estonian Environment Agency, Penijõe, 90305 Lihula, Läänemaa, Estonia

Nii noored kui vanad hiireviud rändavad Kesk-Euroopasse

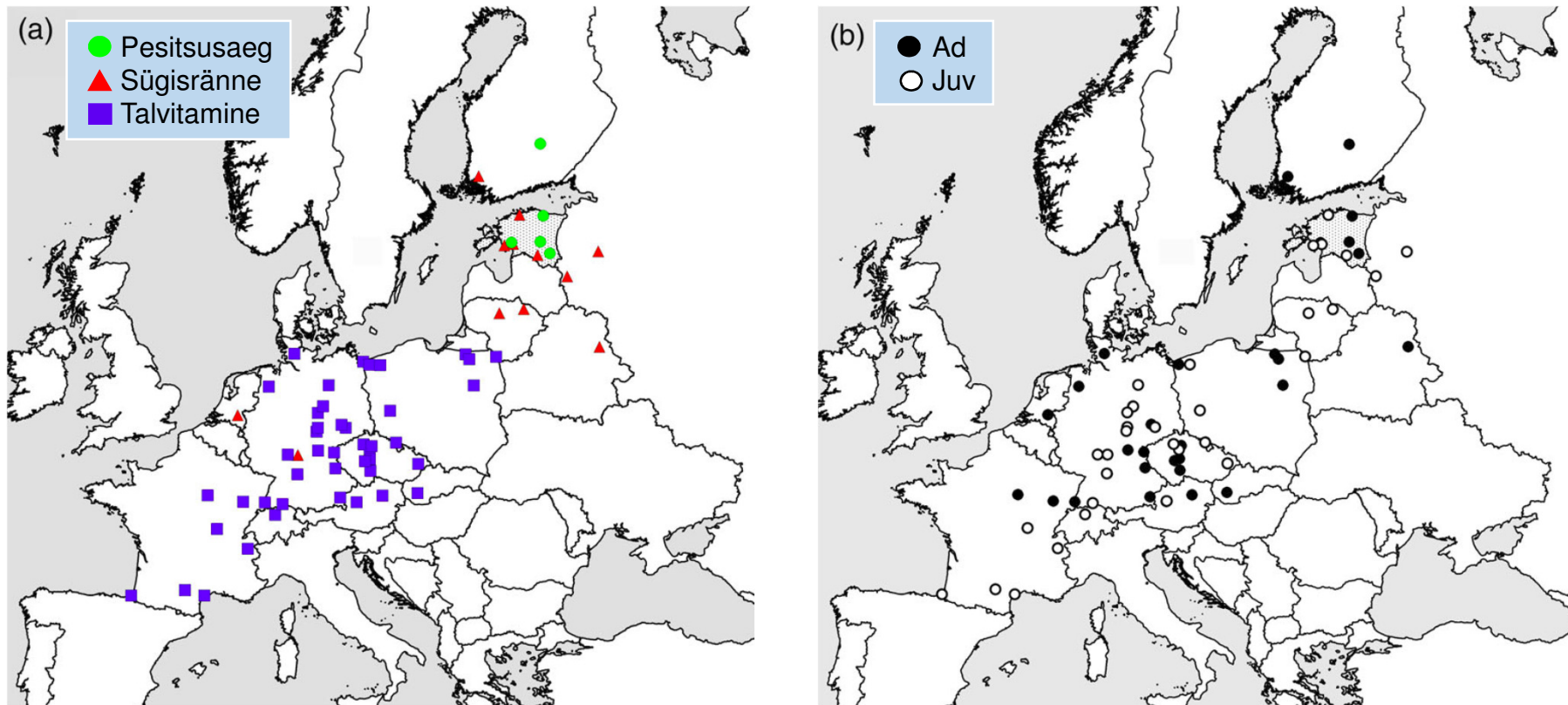


Figure 1. Recovery locations of Common Buzzards ringed as nestlings in Estonia (shaded) according to the age at recovery (a: green circles indicate breeding birds, red triangles birds on pre-migratory dispersal and autumn migration, and blue squares

wintering birds) and according to the season (b: open circles are >1y birds and filled circles are <1y birds).

2. Kui suured on rändesuundade erinevused asurkondade vahel?



Rootsi ja Soome kalakotkad rõngastusandmed

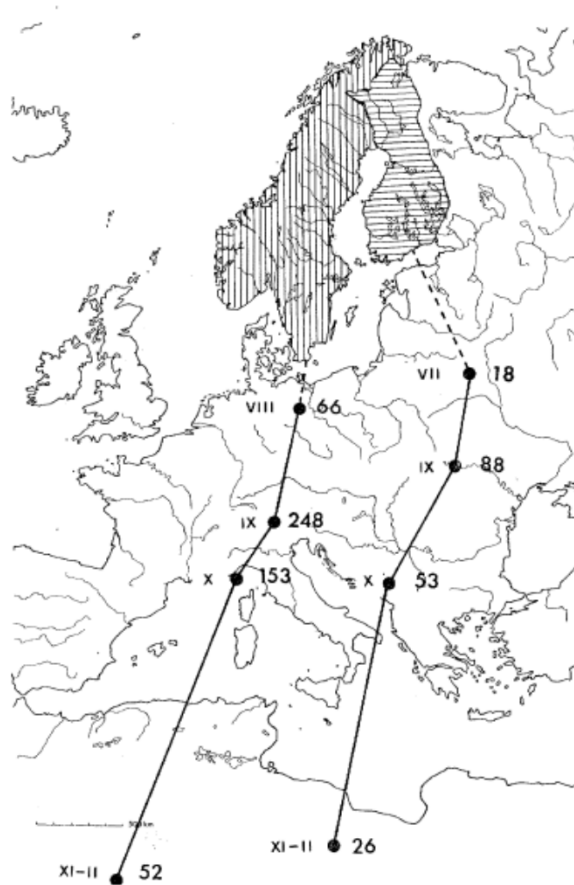
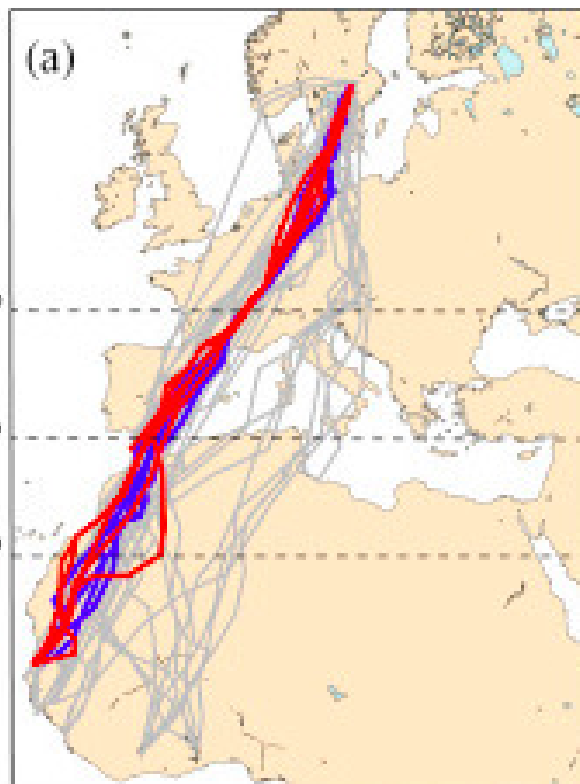


Fig. 8. Mean coordinates of recoveries of Ospreys during their first autumn flight from Scandinavia and Finland, respectively. Roman figures denote month of recovery; Arabic figures indicate number of recoveries included in the calculations.



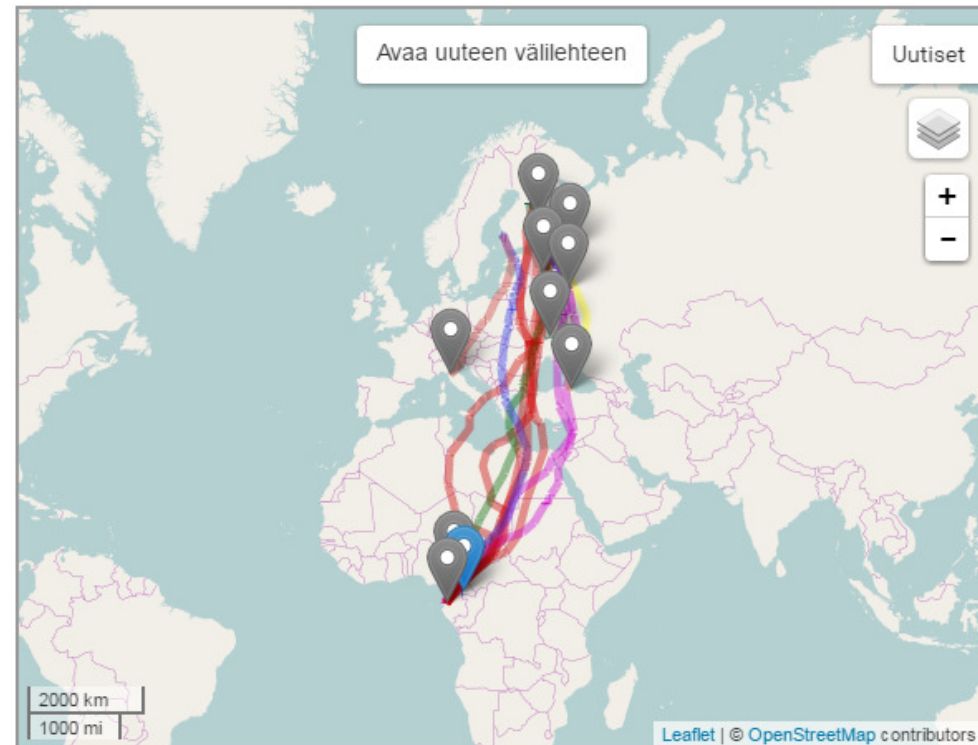
Österlöf 1977, *Ornis Scand.*

Rootsi ja Soome kalakotkad telemetria



Vardanis et al. 2016 *Animal Behaviour*

Kainuun sääksien syysmuutto 2016



<http://www.luomus.fi/fi/kainuun-satelliittisaakset>

Migration patterns of the Osprey *Pandion haliaetus* on the Eastern European–East African flyway

Ülo Väli^{1,2*} and Urmas Sellis²

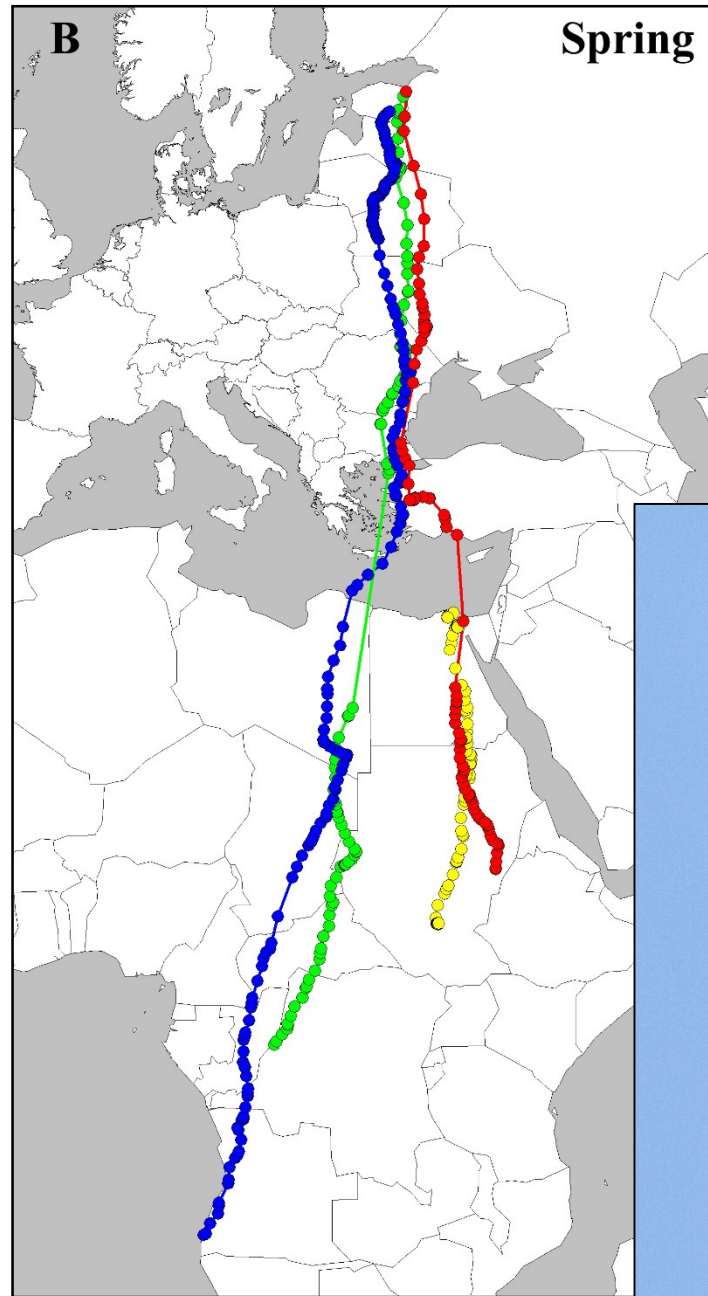
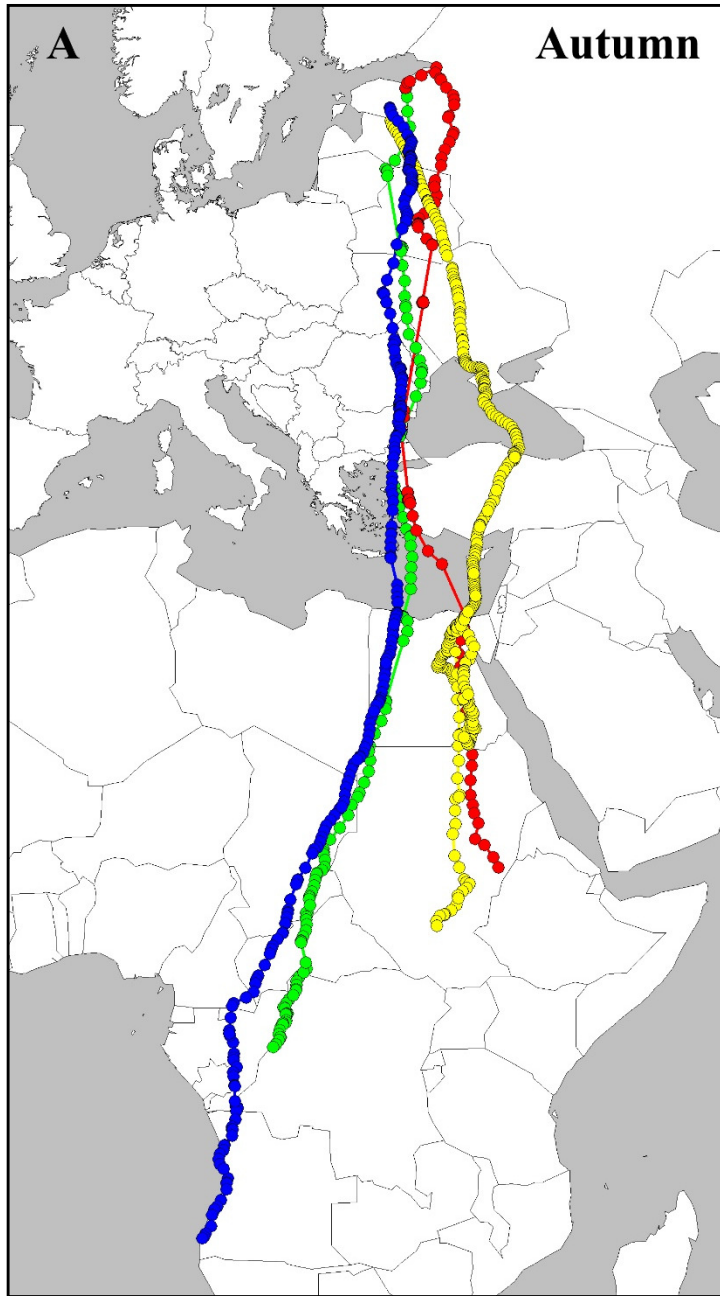
ISSN 0869-4362

Русский орнитологический журнал 2014, Том 23, Экспресс-выпуск 1066: 3477-3486

Why an Osprey *Pandion haliaetus* after breeding in Estonia on autumn migrations regularly moved north-east to visit St. Petersburg?

Ü.Väli, U.Sellis





Väli & Sellis
2016, *Ostrich*

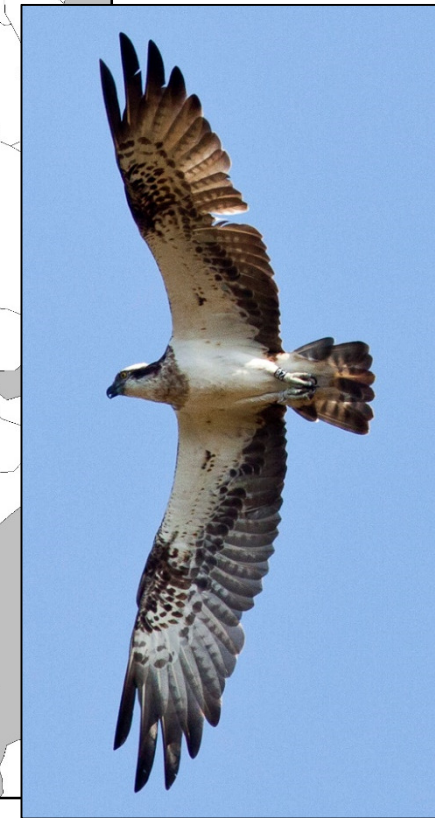


Figure 1: Autumn (a) and spring (b) migration routes of the four studied Ospreys *Ilmar*, *Maria*, *Erika* and *Piret*. Dots indicate registered locations, which are connected with direct lines on uncovered route sections. Only one route per bird is presented

Mida mõtles Piret?

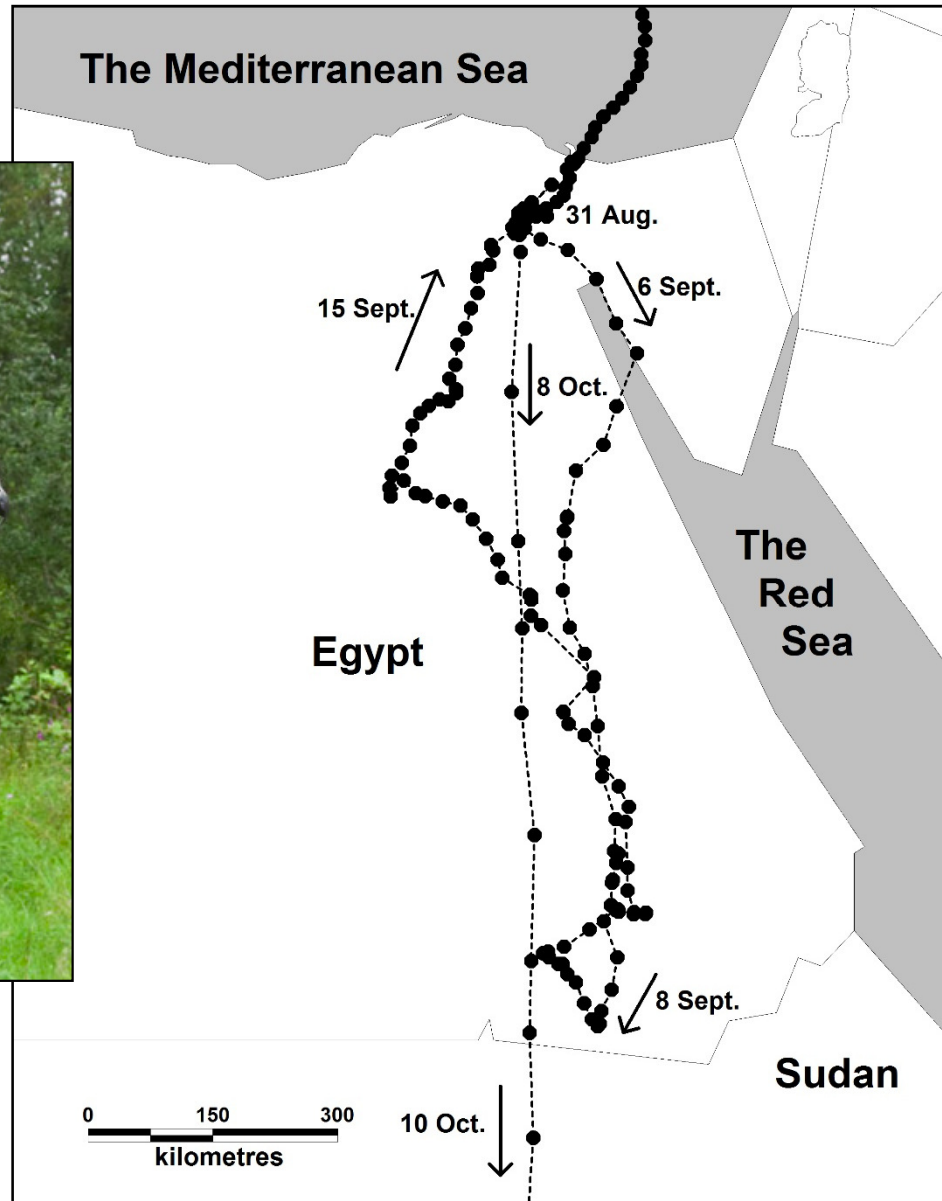
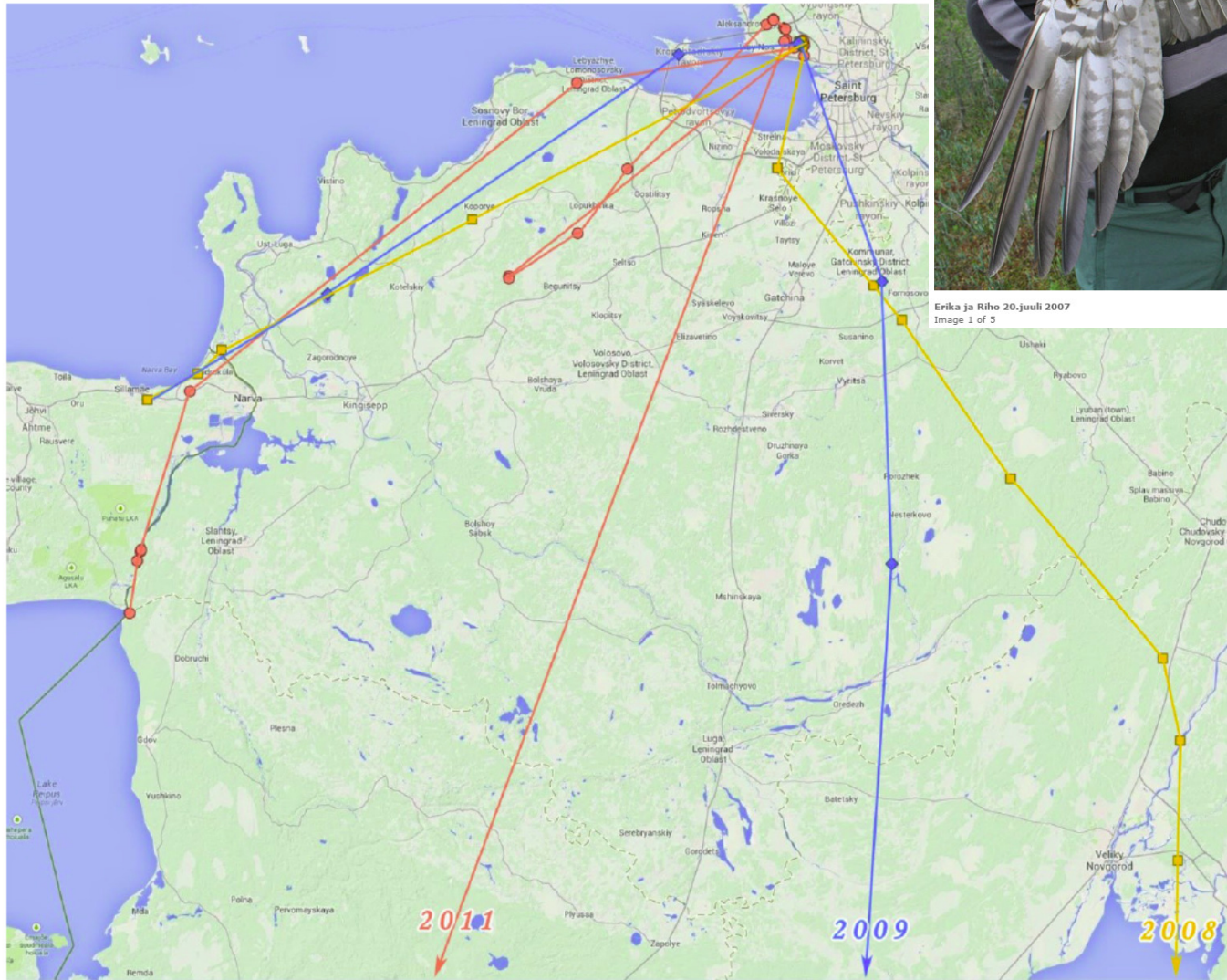


Figure 3: Back-migration of the female *Piret* in the autumn journey in 2012

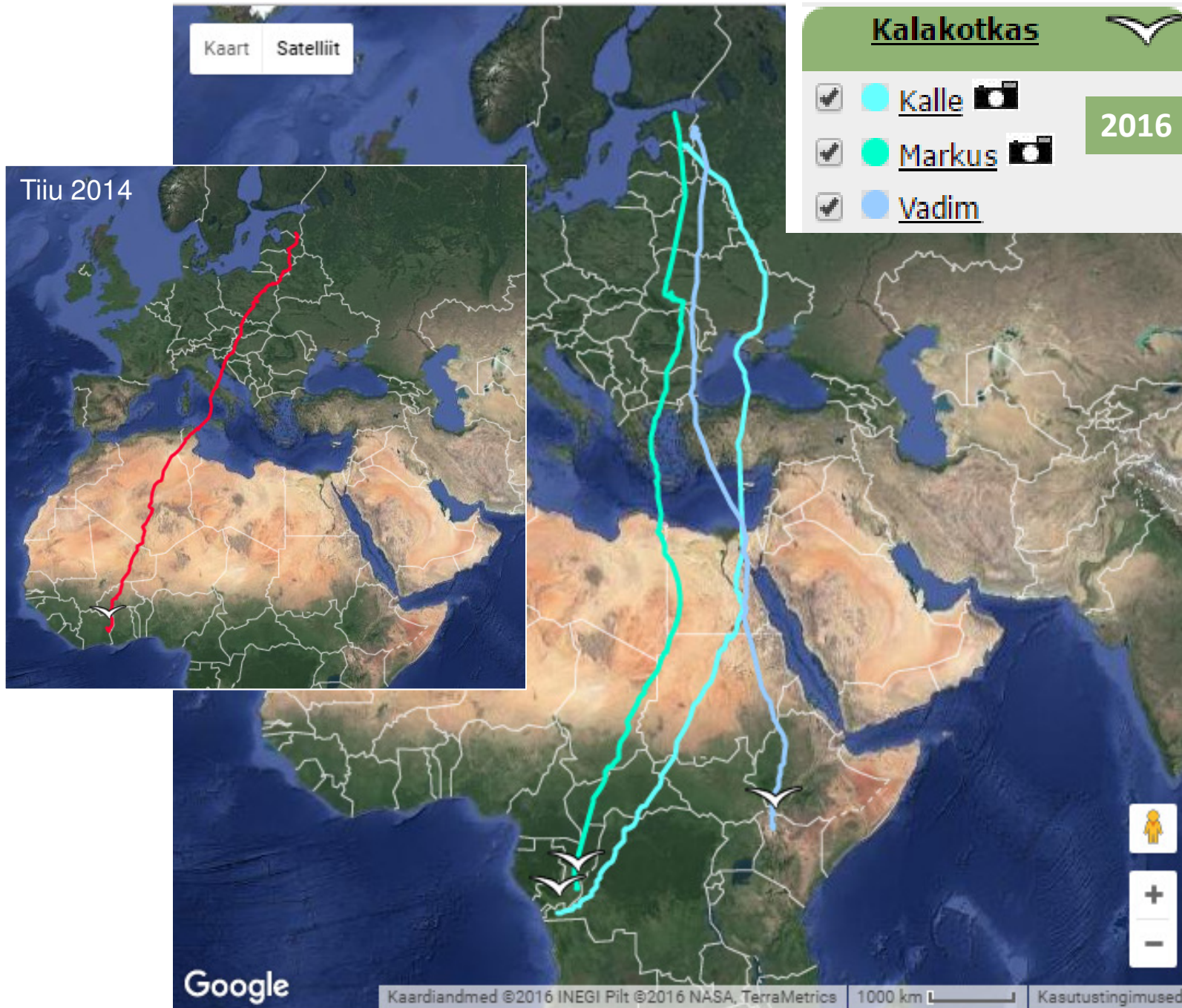
Ja mida mõtles Erika?



<http://birdmap.5dvision.ee/>

Erika ja Riho 20.juuli 2007
Image 1 of 5

CLOSE X



<http://birdmap.5dvision.ee/>

3. Kas ränne aitab määrata (alam)liigilist kuuluvust?

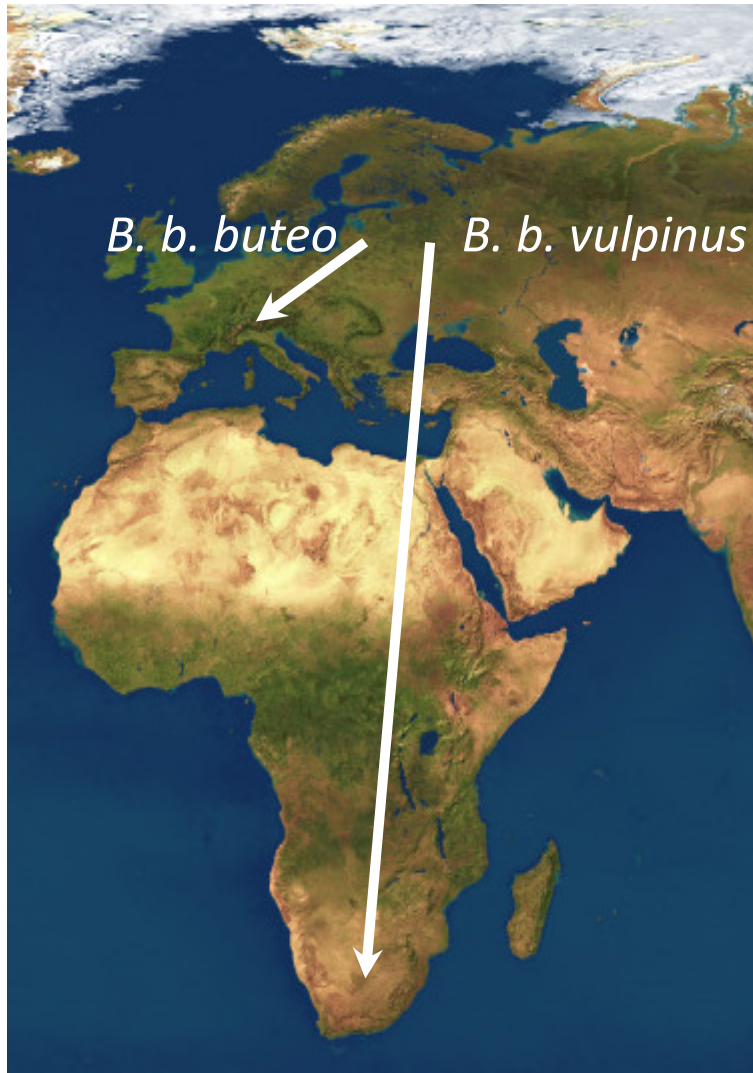
Buteo buteo buteo



Buteo buteo vulpinus



3. Kas ränne aitab määrata (alam)liigilist kuuluvust?



(Peaaegu?) kõik meie hiireviud rändavad Kesk-Euroopasse

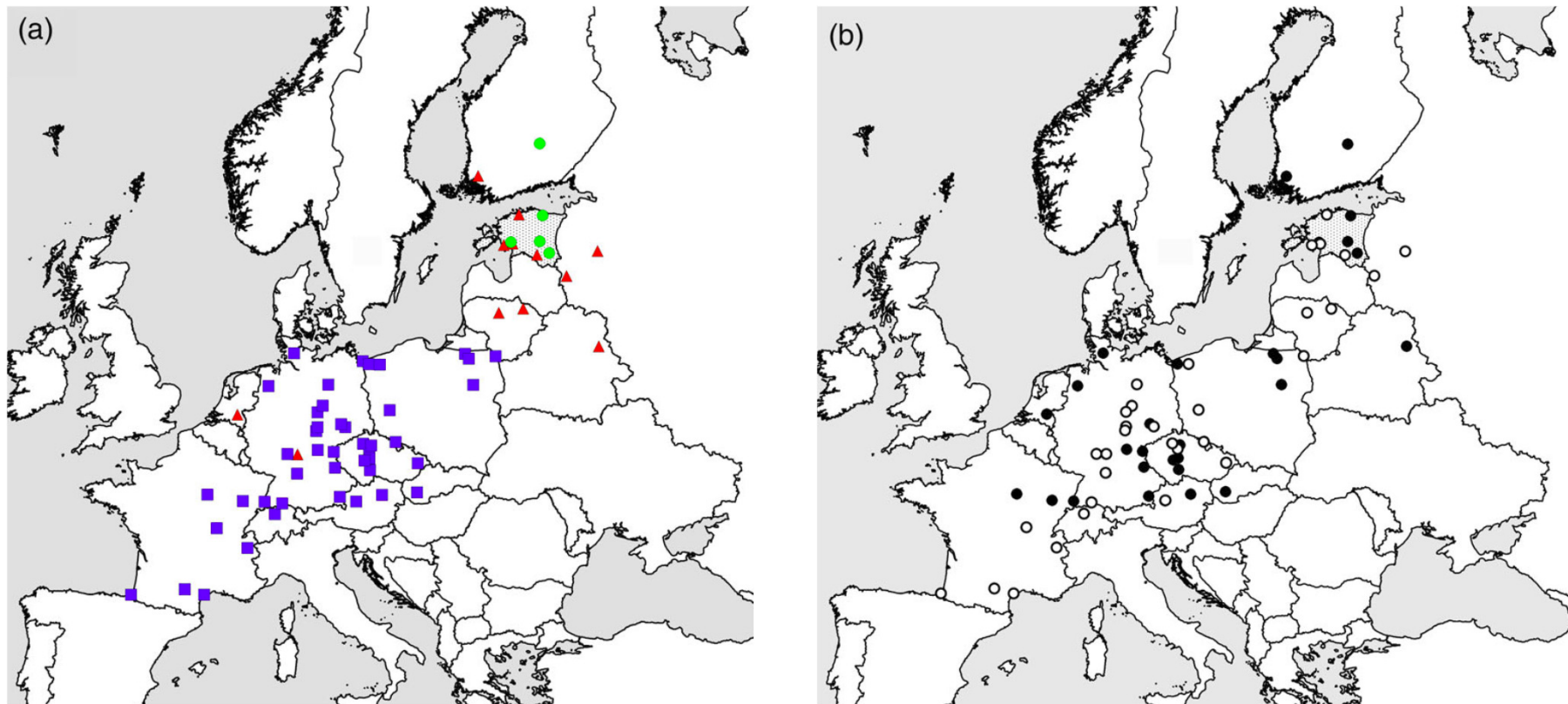
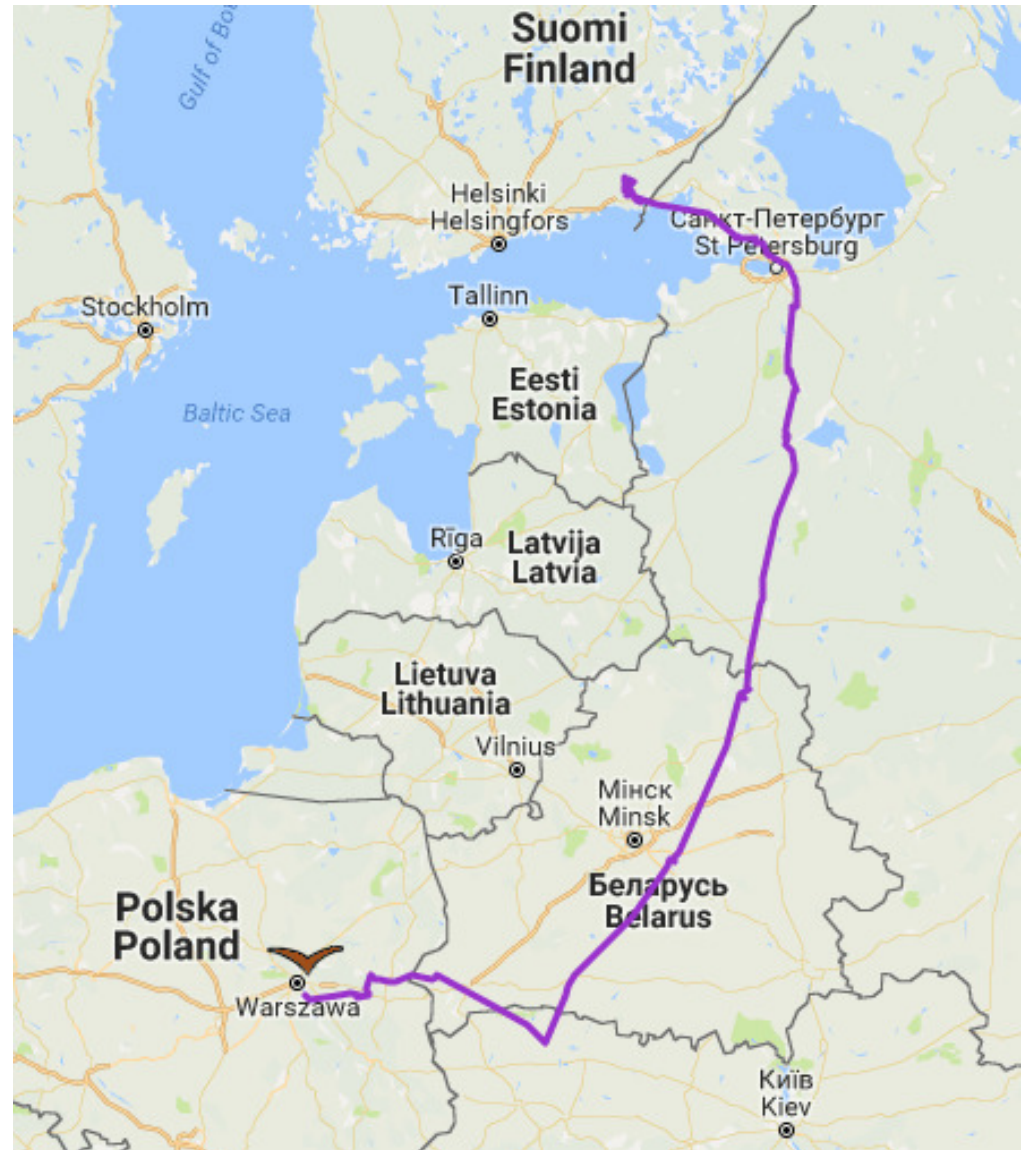


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wintering birds) and according to the season (b: open circles are >1y birds and filled circles are <1y birds).

... mõnikord ka ringiga (Kordian, sügis 2016)

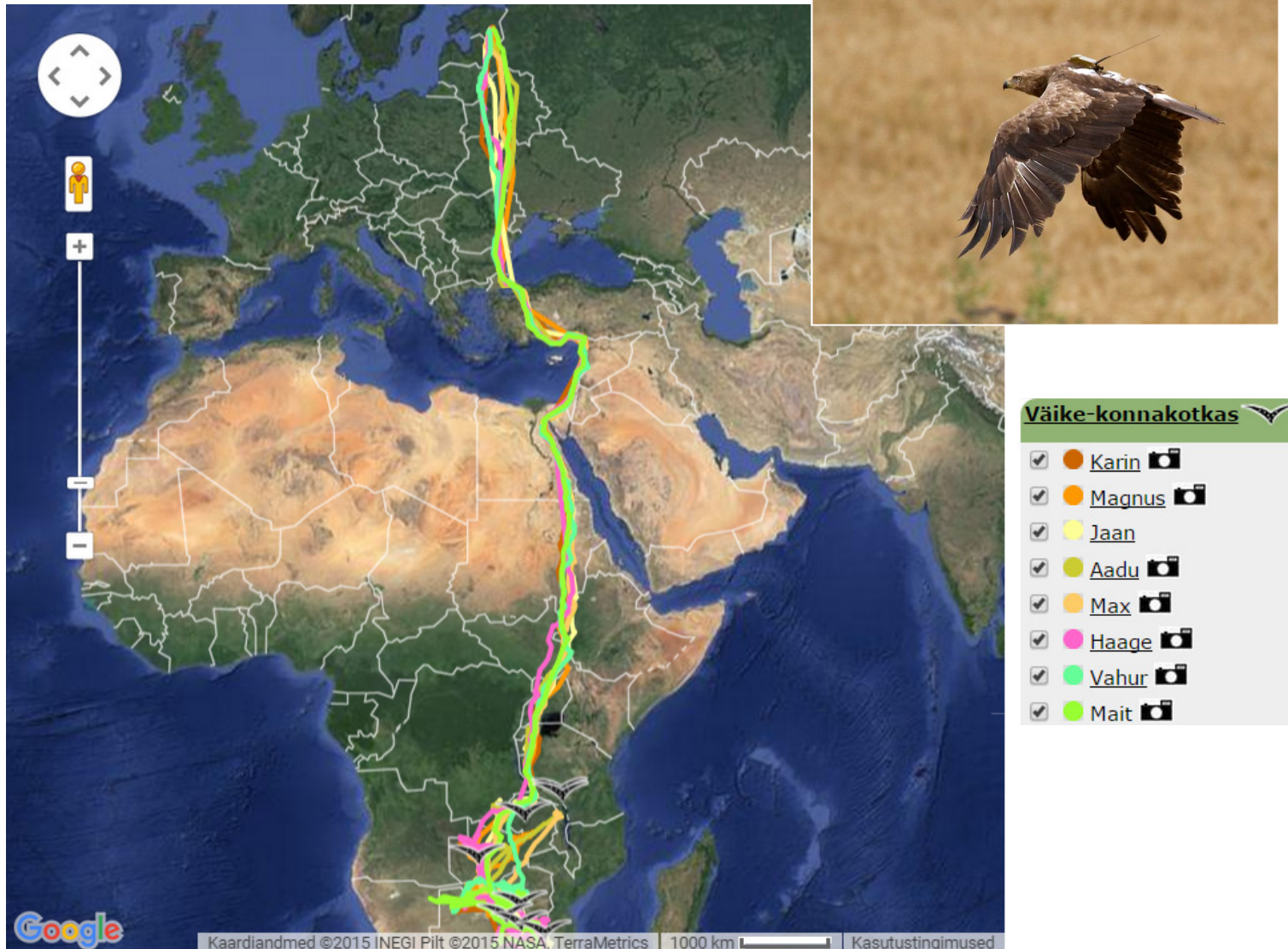


4. Kas erinevad rändeteed aitavad hoida liike lahus?

- Väli jt koostamisel: *Is different migration strategy sufficient isolation barrier for Greater and Lesser Spotted Eagles in a hybridising population*

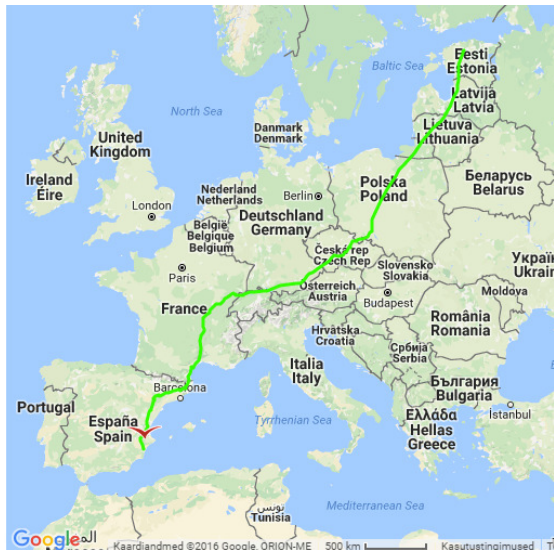


Kuhu rändavad väike-konnakotkad?

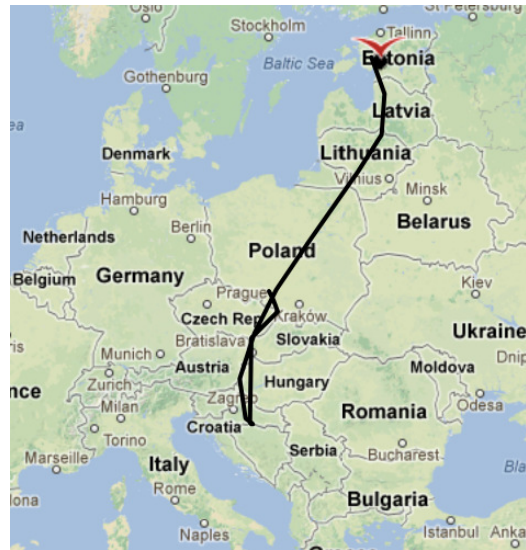


<http://birdmap.5dvision.ee/>

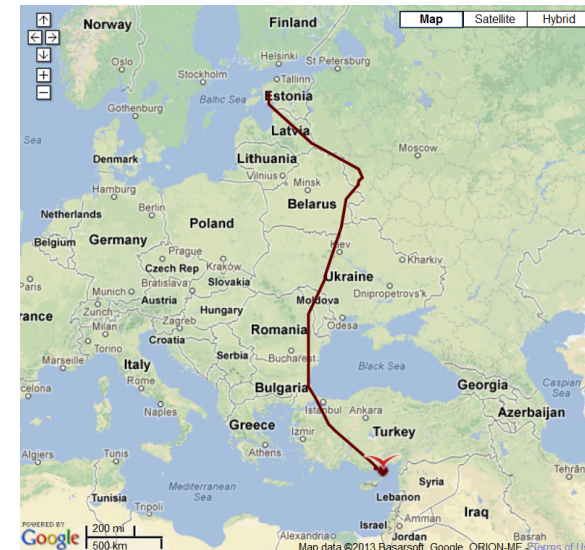
Kuhu rändavad suur-konnakotkad?



Iberiasse



Balkanile

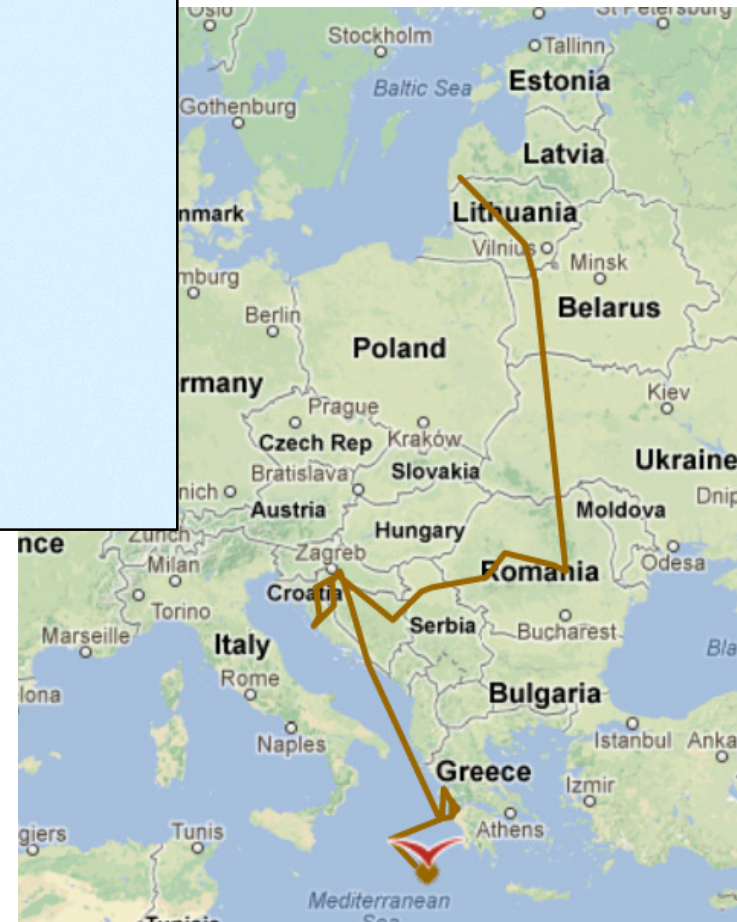


Anatooliasse

Kuhu rändavad hübriidid?



Luule, F1 hübriid



Kuhu rändavad hübriidid?

Urmas Sellis



Teele
F1 x väike



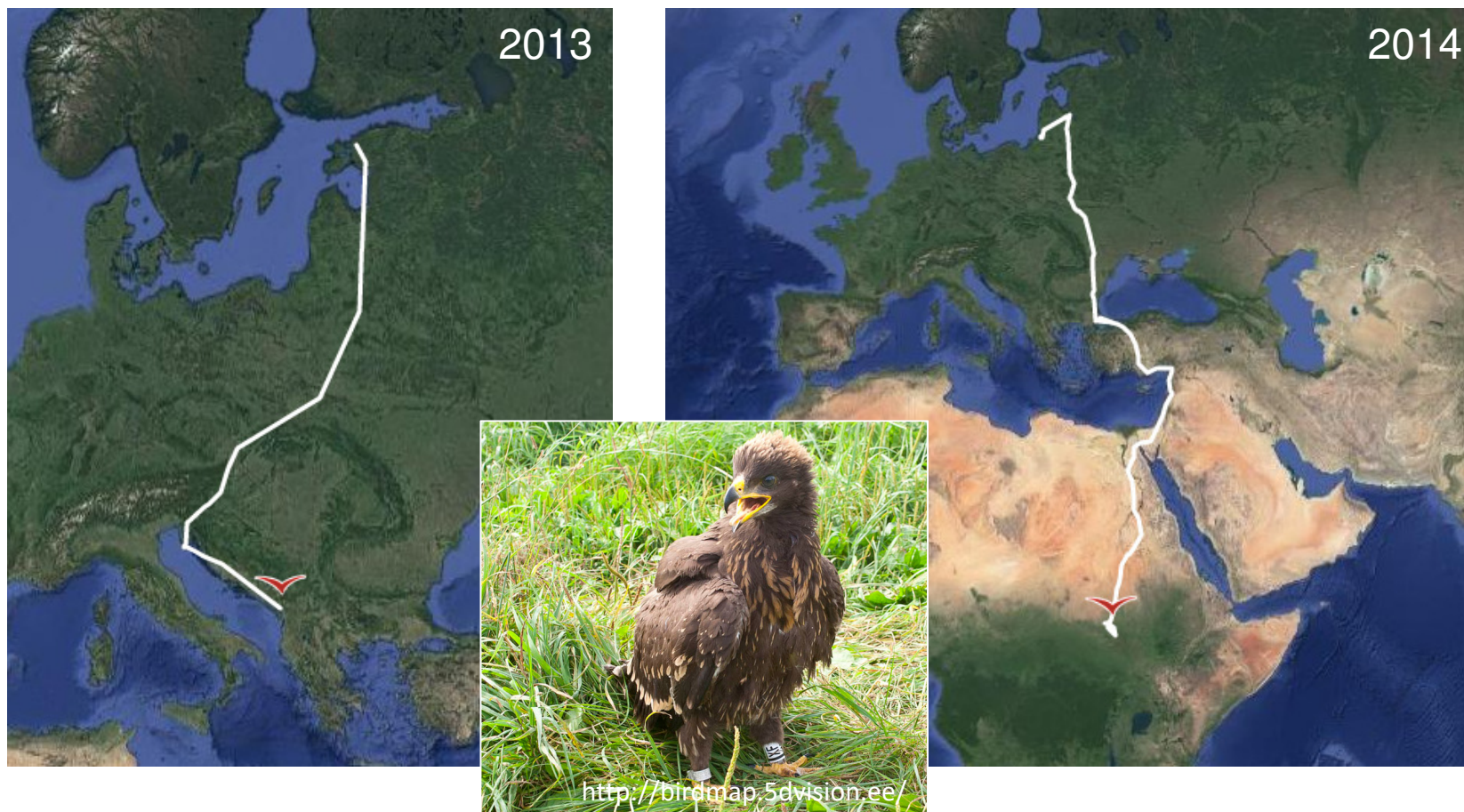
Urmas Sellis



Sander
F1 x väike?



Kuhu rändavad hübriidid?



Tunne, F1 hübriid

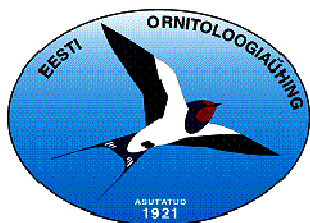
Kokkuvõte - metoodiline

- Rõngastamine on tänapäevalgi oluline meetod rände uurimisel – nii koguneb järeldusteks piisav valim
- Värvirõngastamine suurendab taasleidude arvu märkimisväärselt võrreldes tavarõngastamisega
- Telemeetria võimaldab jälgida detailselt üksikute isendite rännet, kuid valim jääb tavaliselt asurkonna kohta järelduste tegemiseks liiga väikeseks

Kokkuvõte - tulemused

- Rändeteed varieeruvad isendite vahel
- Vanusegrupiti võib rändsus erineda (kanakull), aga ei pruugi (hiireviu)
- Eesti asurkonnal võib olla üks (kanakull, hiireviu, väike-konnakotkas) või mitu rändesuunda (kalakotkas, suur-konnakotkas), need võivad erineda naaberasurkondade omadest
- Ränne aitab määrata (alam)liike, aga ei pruugi vältida nende ristumist (hiireviu, konnakotkad)

Tänu



KESKKONNAAMET



KESKINNAINVESTEERINGUTE
KESKUS



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