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Federal Department of the Environment,  
Transport, Energy and Communications DETEC

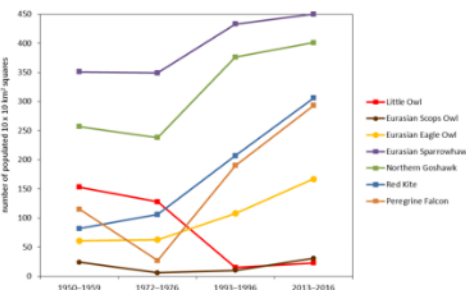
**Federal Office for the Environment FOEN**  
Species, Ecosystems, Landscapes Division



vogelwarte.ch

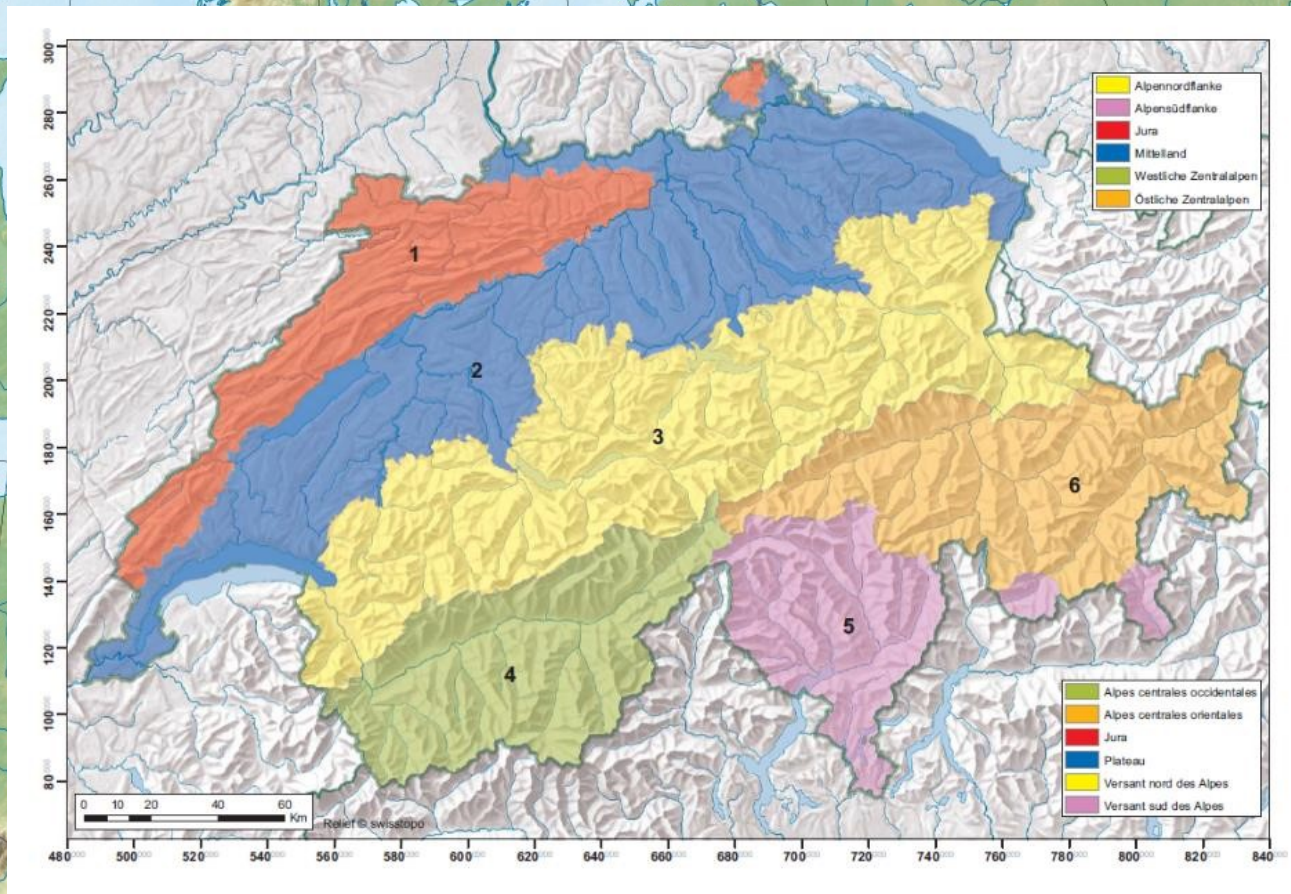
# Raptor Conservation in Switzerland

## "Overview"



MoU Raptor – TAG3  
Sempach, 12.12.2018









# Switzerland is divers.....



~46,000 species (potentially 60,000)  
49 endemics



A gradient from mediterranean to high alpine species



31% Forest (>50% protective forest)  
35.9% Agriculture (12% organic)



7.5% «people-habitat» and infrastructure (60% sealed)





bio-divers...











**but also cultural divers**

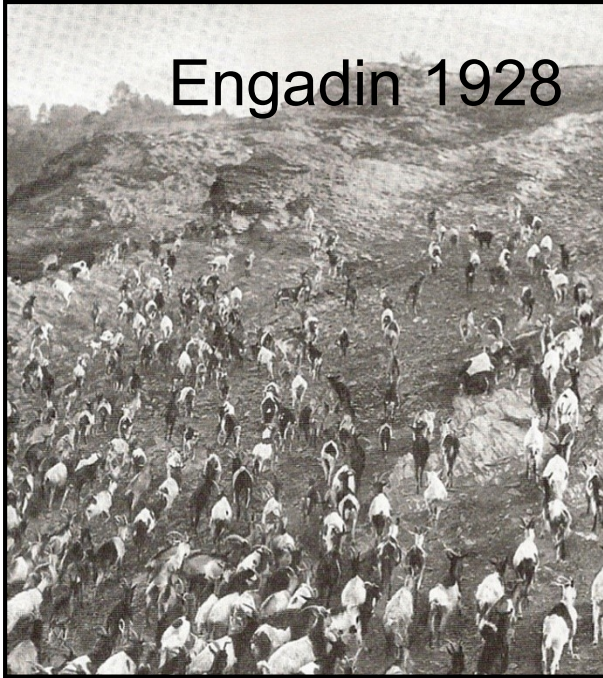




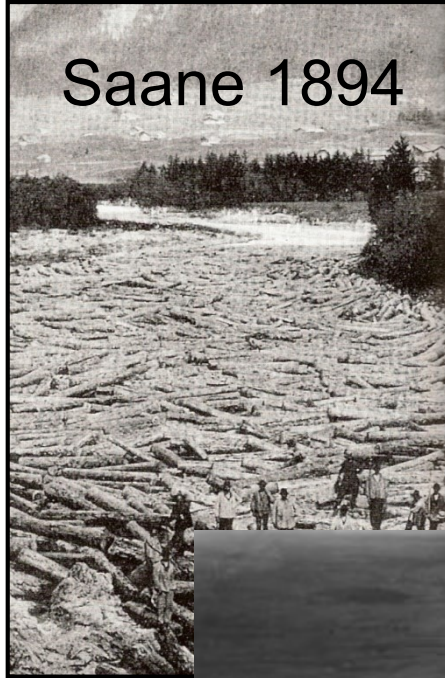


# «First biodiversity crisis»

Engadin 1928



Saane 1894

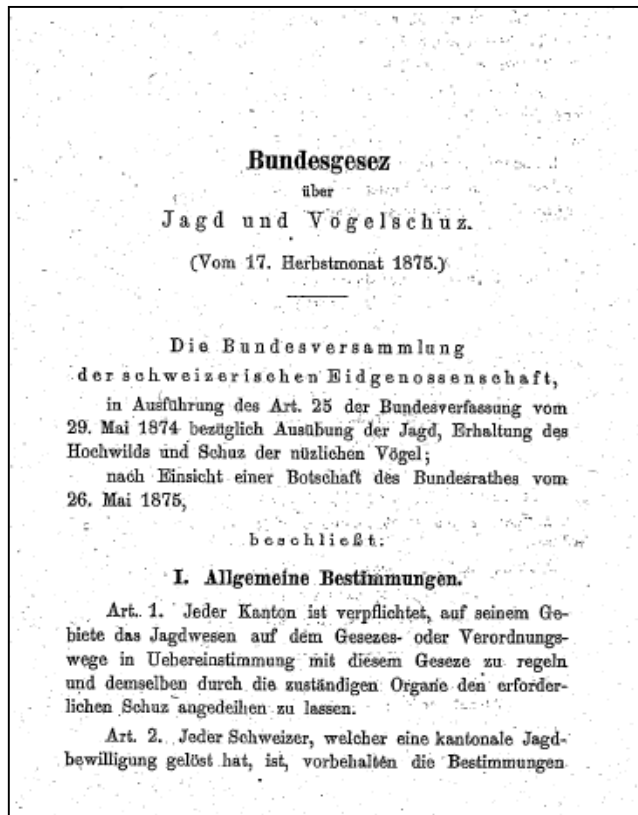




# First laws on «nature conservation»

1875/76 first forestry law & hunting and bird conservation law

- > Sustainable forest use & afforestation
- > Protection of females & offspring
- > Delimitation of protected areas









# Recovery of habitats & wildlife populations

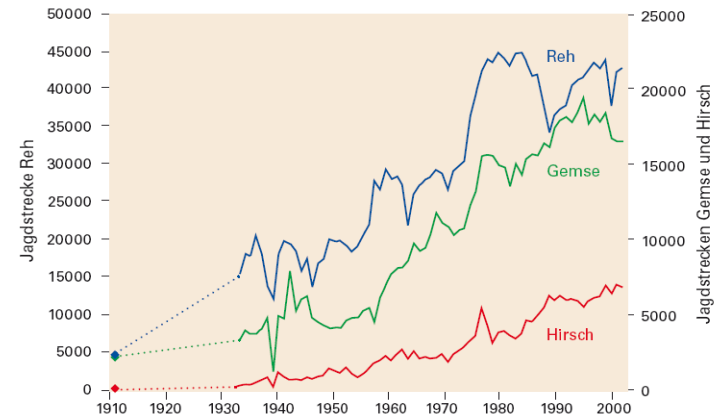


Dägelsberg ZH

1900

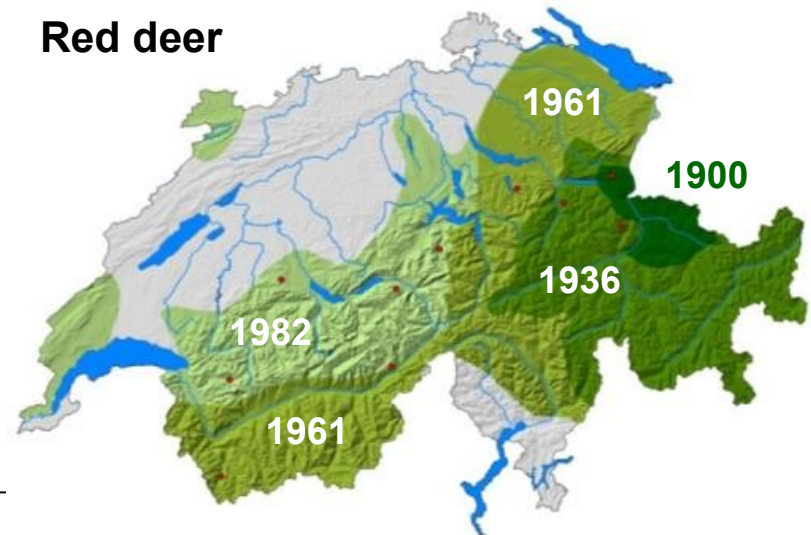


2004



Development of the hunting bag 1910–2000

## Red deer

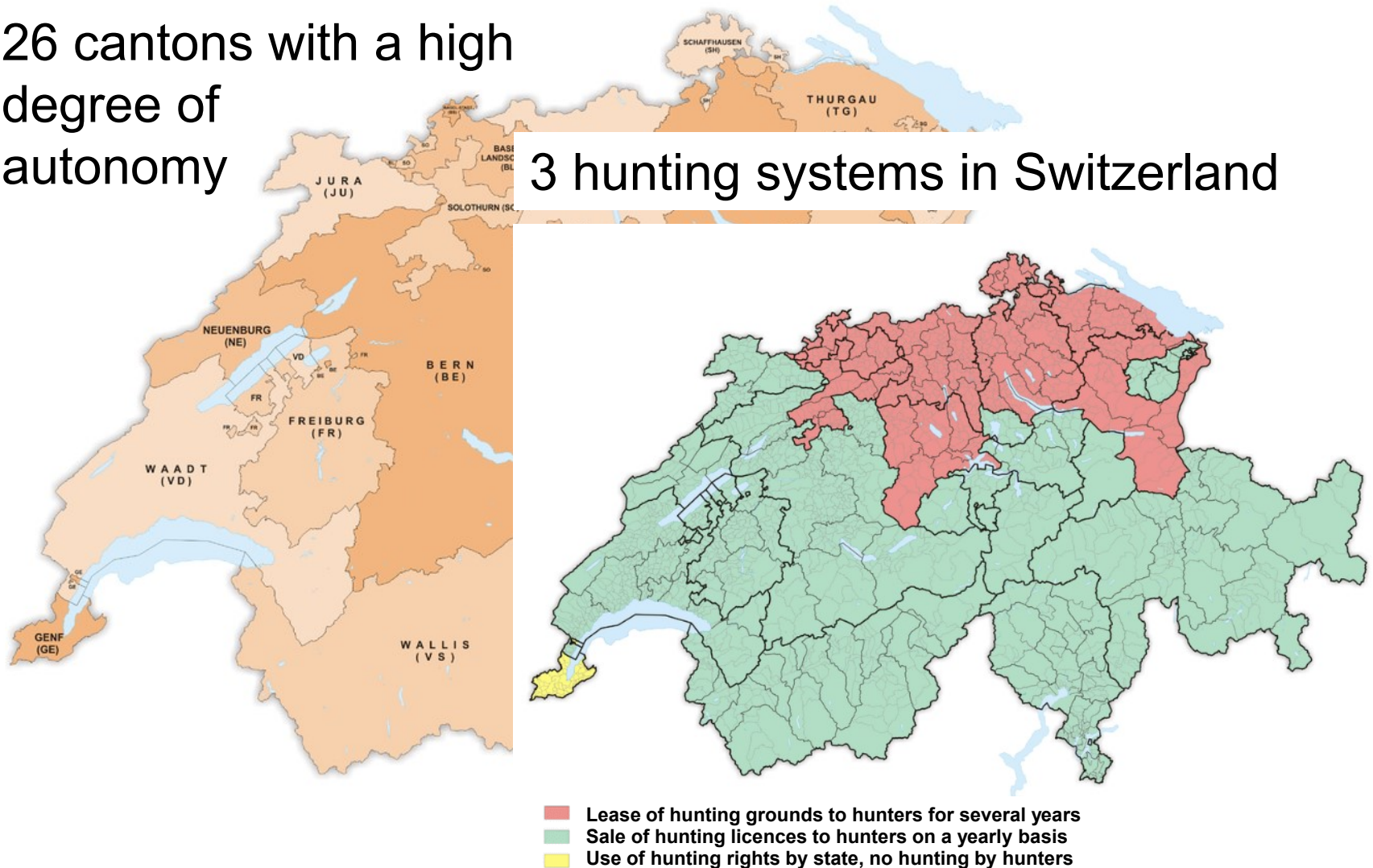




# Switzerland as a federal state

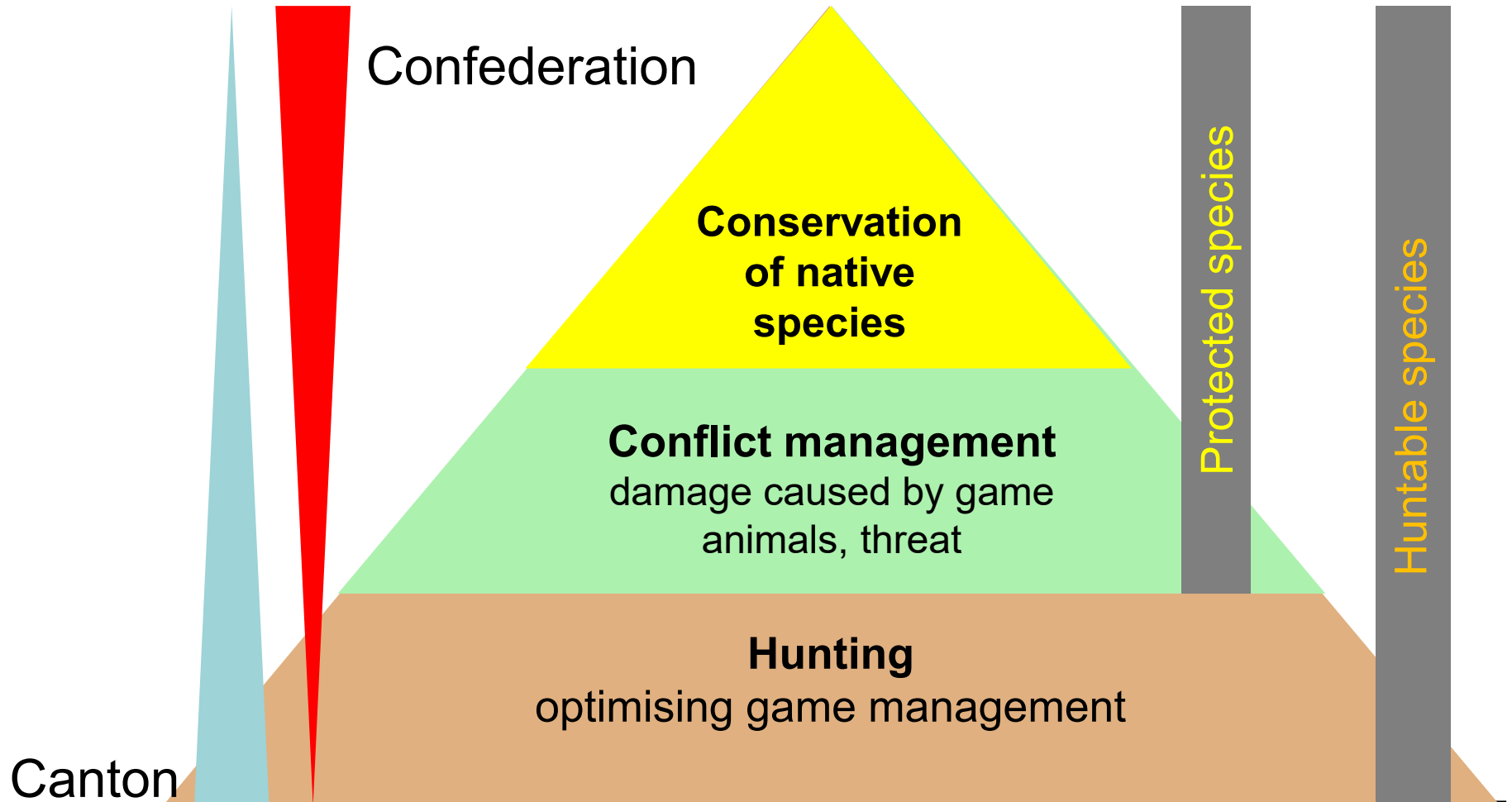
26 cantons with a high degree of autonomy

3 hunting systems in Switzerland



# Wildlife management: legal basis and governance

Wildlife management according to national hunting law

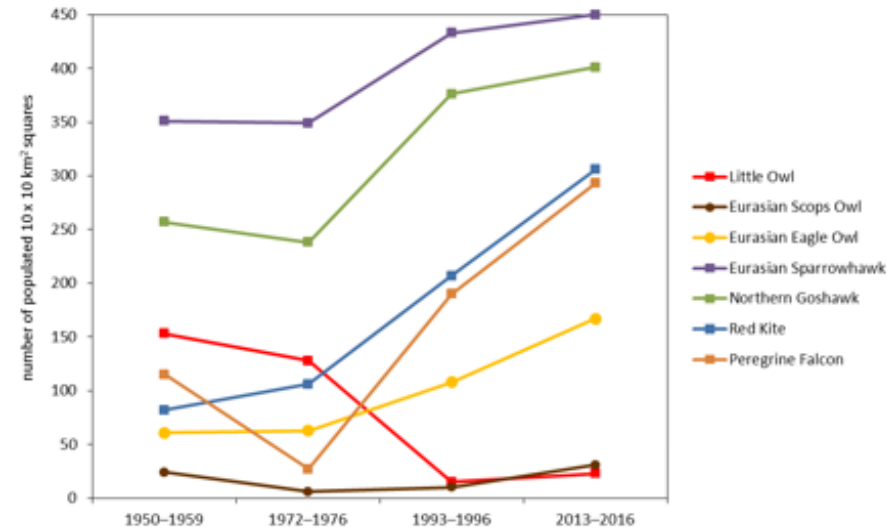
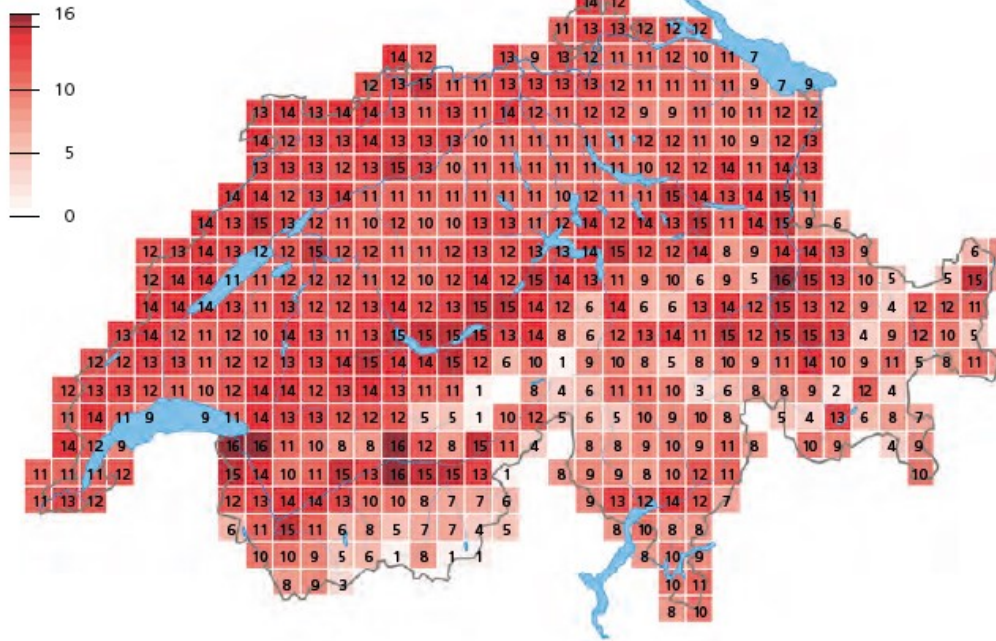






# Raptor conservation is a positive story

Anzahl Greifvogel- und Eulenarten



1950-1959



1972-1976



1993-1996



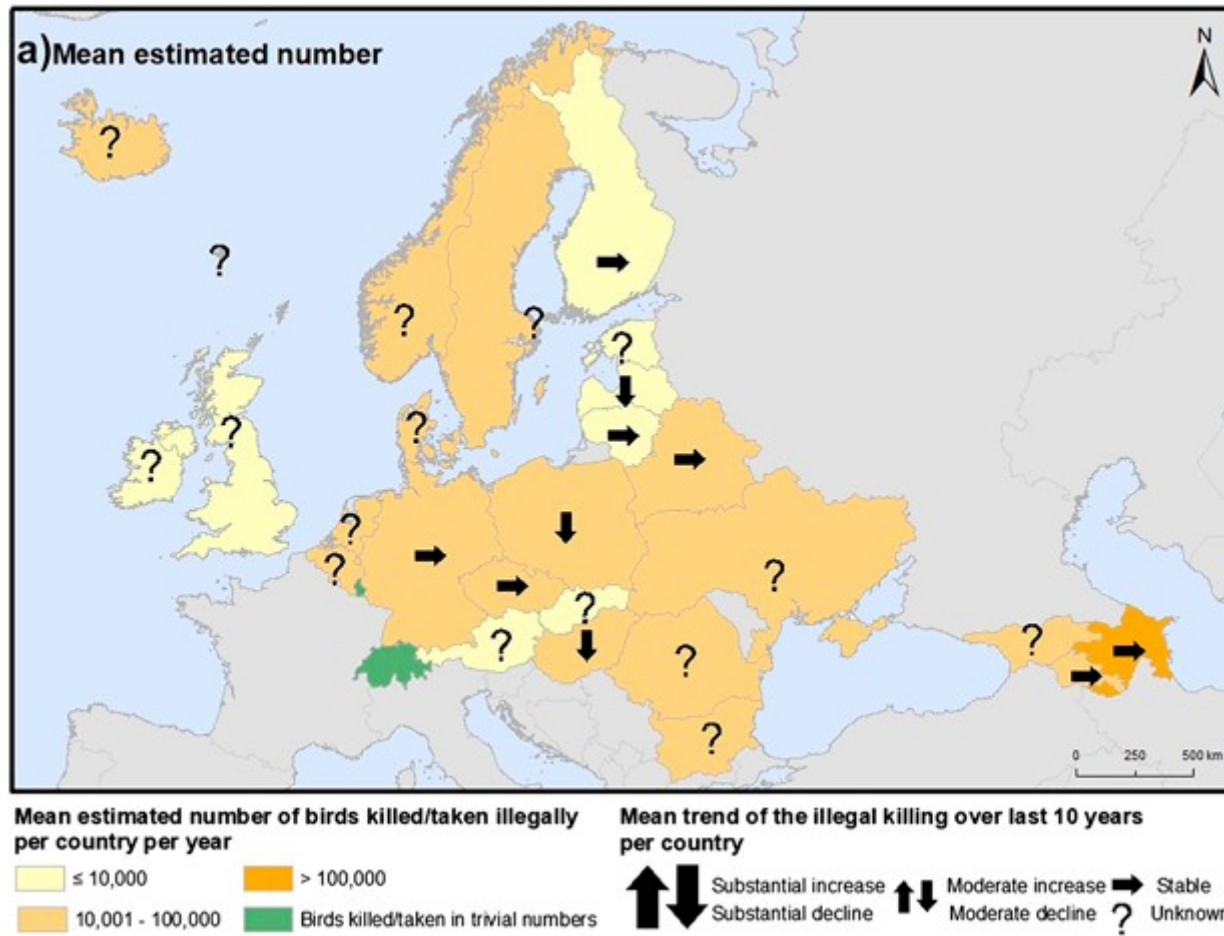
2013-2016







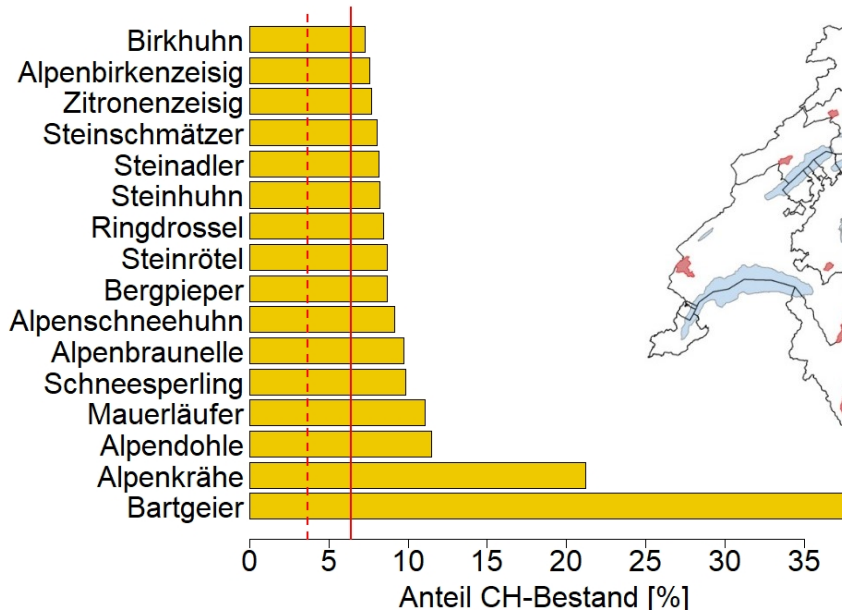
# Illegal killing in Switzerland in trivial numbers







# Reintroduction of bearded vultures



1950–1959



1972–1976



1993–1996



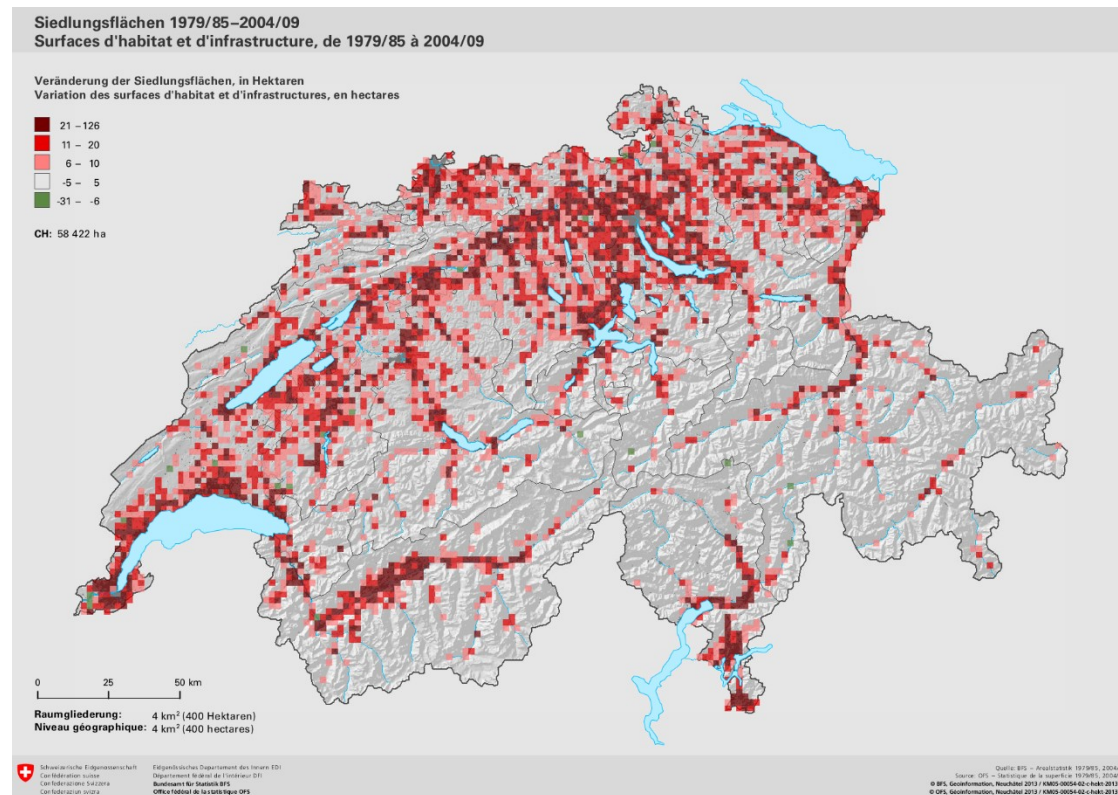
2013–2016







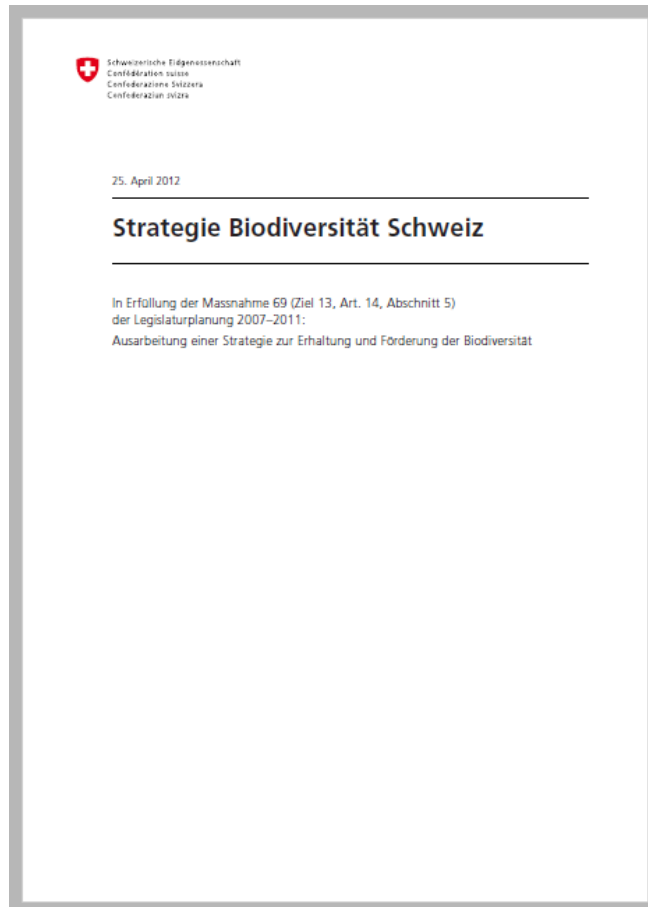
# «Second biodiversity crisis»







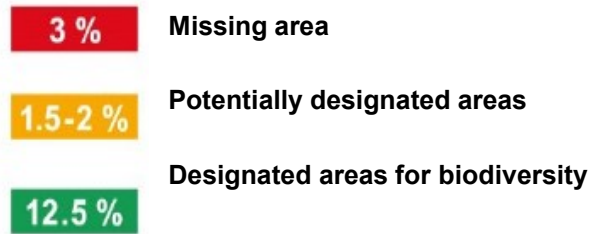
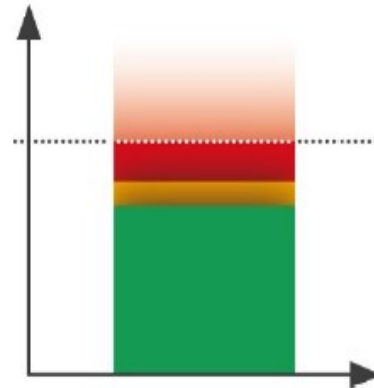
# Biodiversity Strategy Switzerland





# Protected areas: Aichi Target 11

**17%**  
**Minimum objective**  
(Aichi Target 11)



**Légende**  
**Importance des sites**

- Interchangeable (421)
- Moyennement irremplaçable (182)
- Irremplaçable (220)

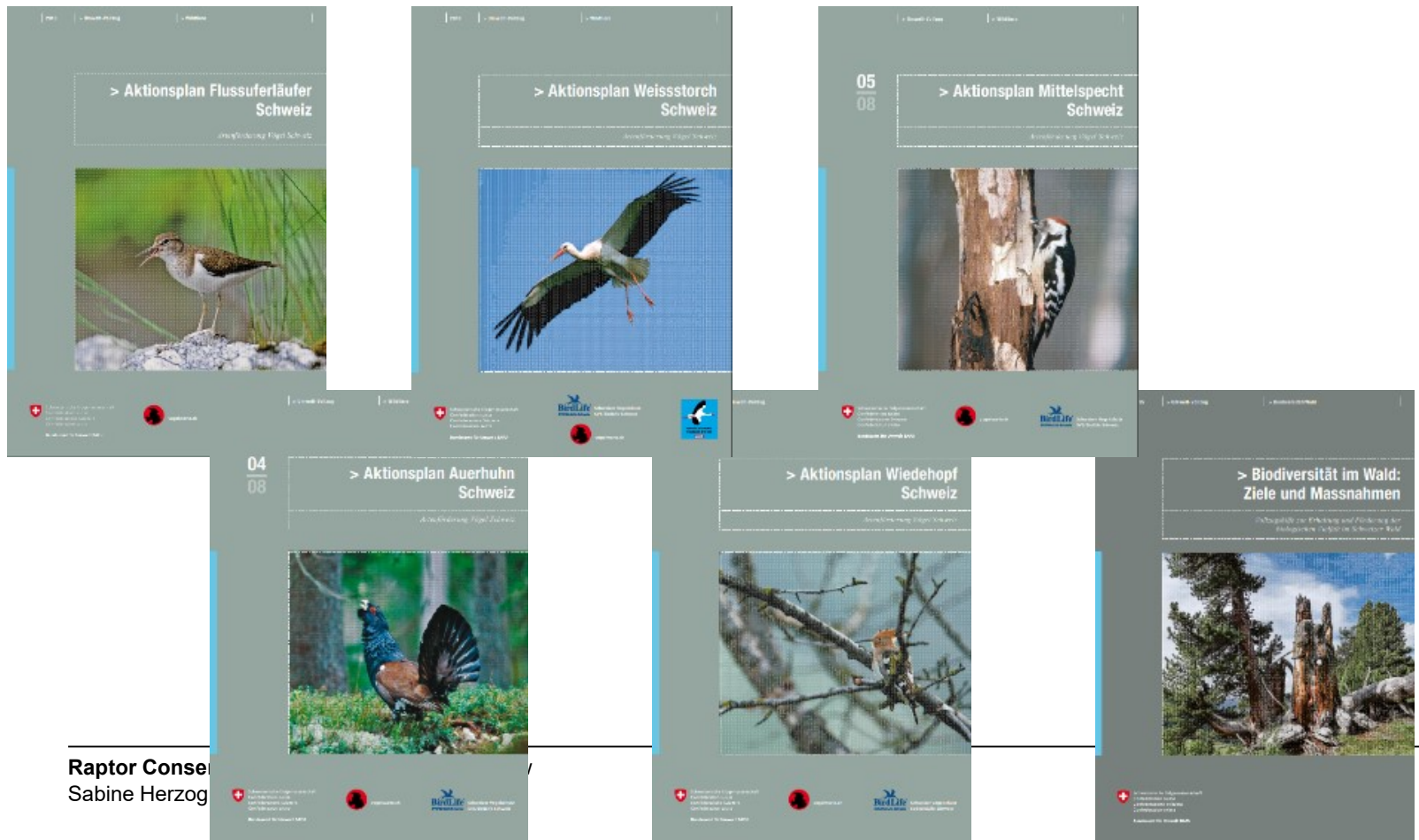






# FOEN: Ministry and Agency

- Policy instruments: laws, ordinances, guidelines, protected areas
- Agency instruments: action plans, monitoring



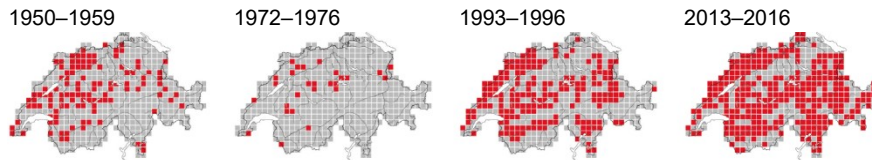




# Monitoring of Birds



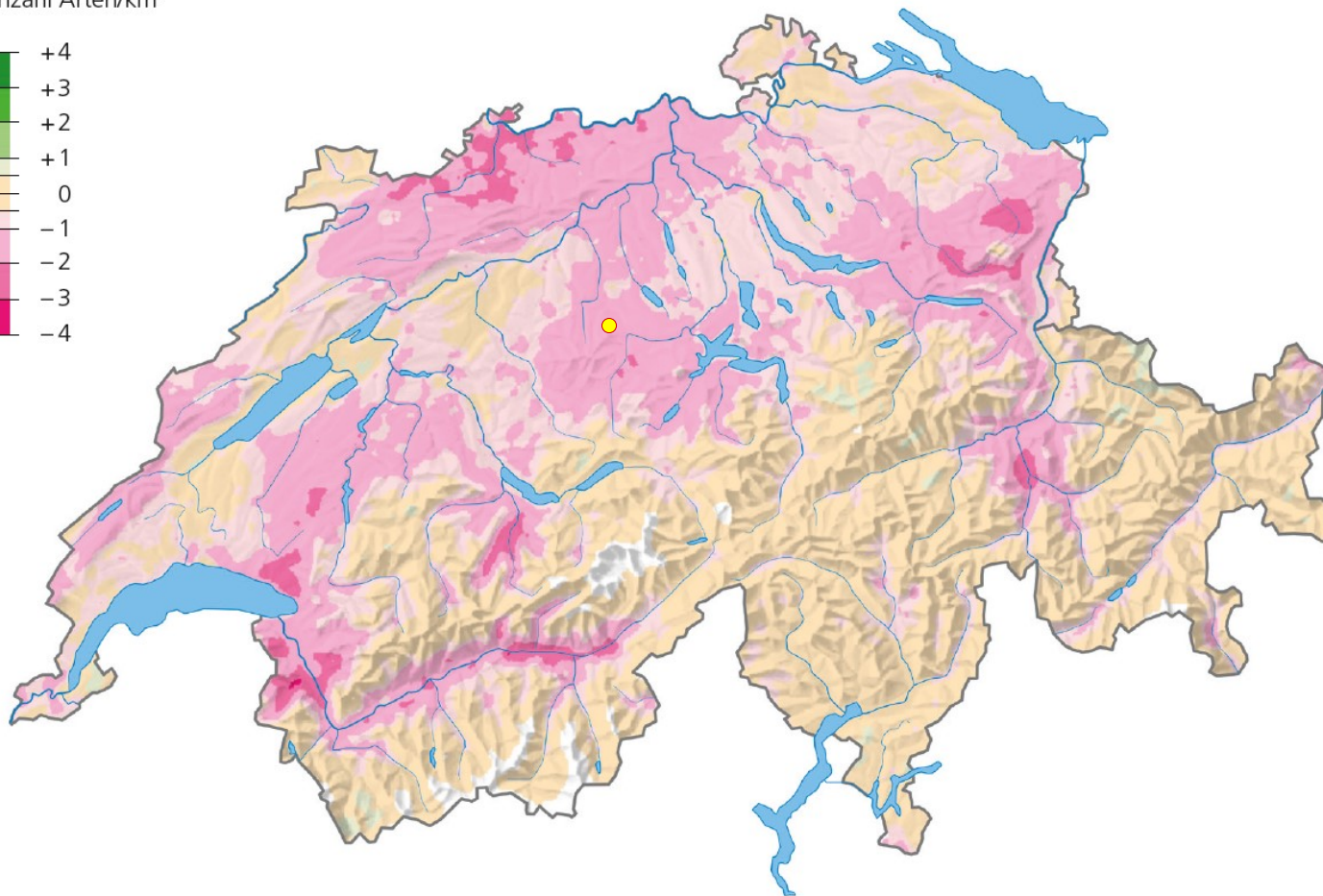
- 4 breeding bird atlases in CH
- 180 regular breeding bird species
- >2000 volunteers walked about 46.500 km during mapping
- yearly mapping for Trend-Monitoring



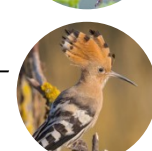
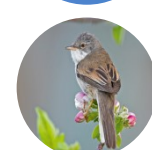


# Population development of 35 species of agricultural landscapes (since 1993–96)

Anzahl Arten/km<sup>2</sup>



Multispecies-Density change map

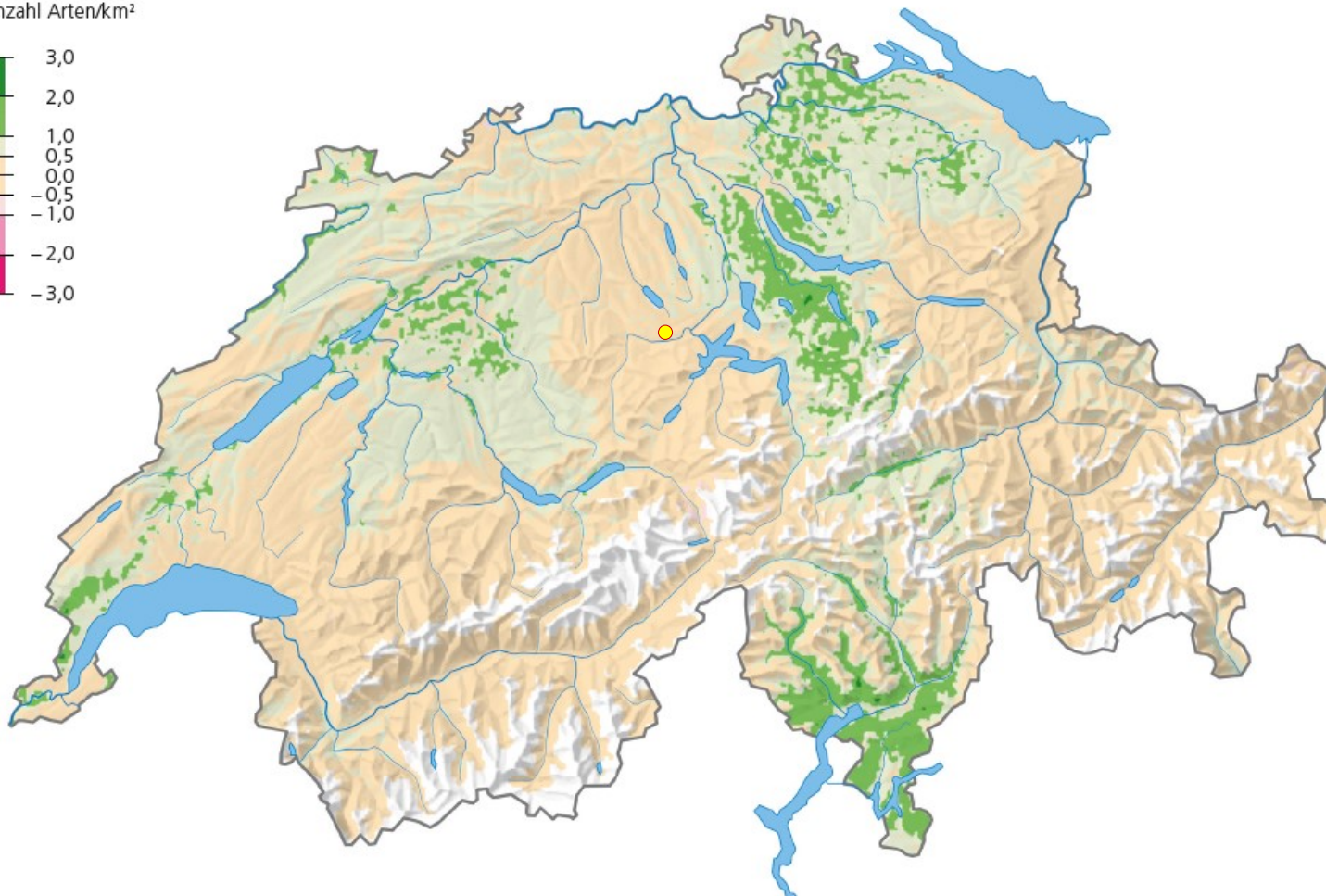




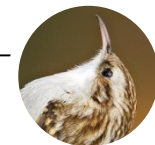
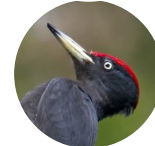


# Development of species depending on dead wood (since 1993–96)

Anzahl Arten/km<sup>2</sup>



Multispecies-Density change map



# Overview of Results 2013–16



- Populations of most forest species increased
- Recovery of raptors and owls
- Supporting measures successful
- Open land species vanish
- Most longdistance migrants decreased strongly
- Insectivorous birds decreased strongly
- Low populations of wetland species
- Climate change forces alpine species into higher regions
- Disturbances increase







# ... positive trend of raptors

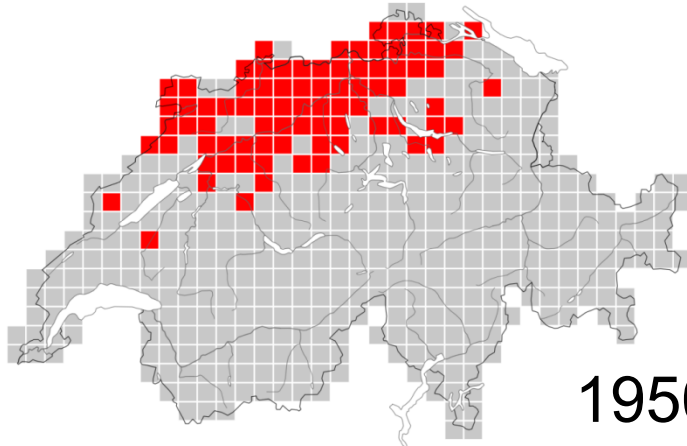


Combined map for Red Kite, Black Kite, Common Buzzard, Kestrel

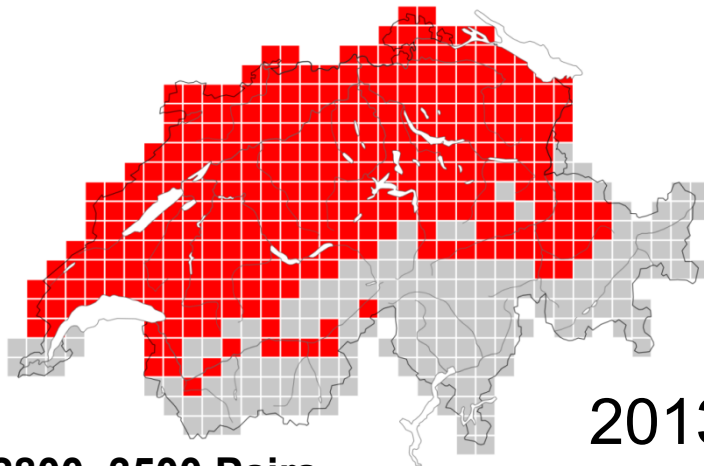


75% of raptor species show a positive population trend

# Red Kite – population increase



1950-59



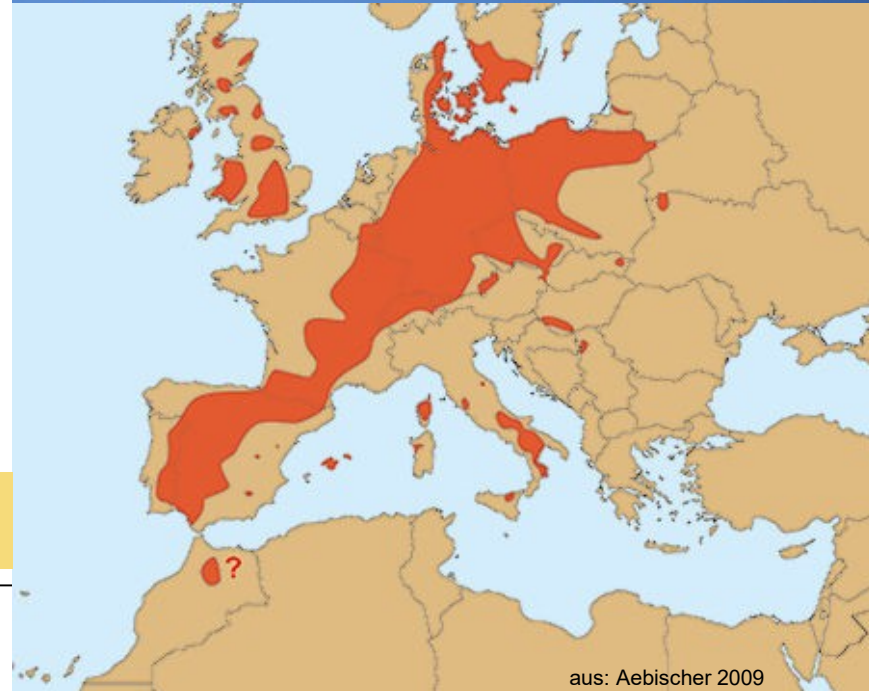
2013-16

2800–3500 Pairs

10% of global population in CH



M. Burkhardt

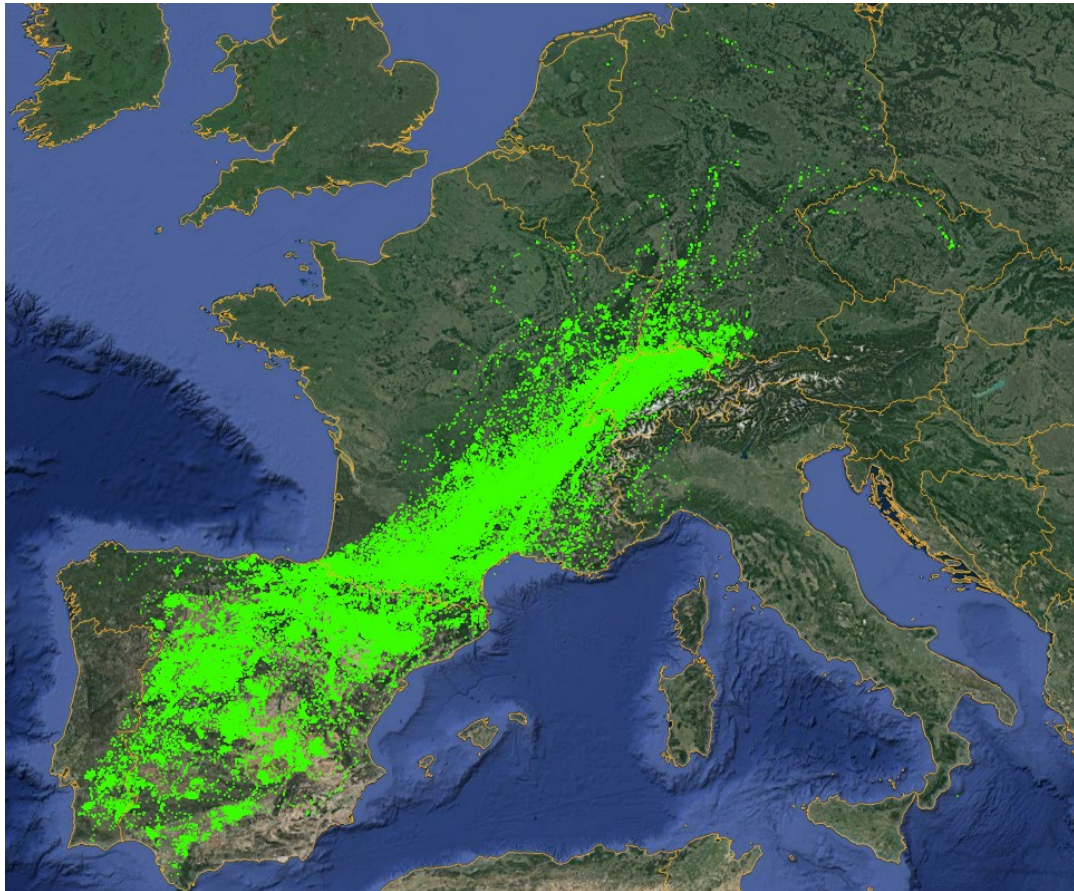


aus: Aebischer 2009





# Movements of Red Kites

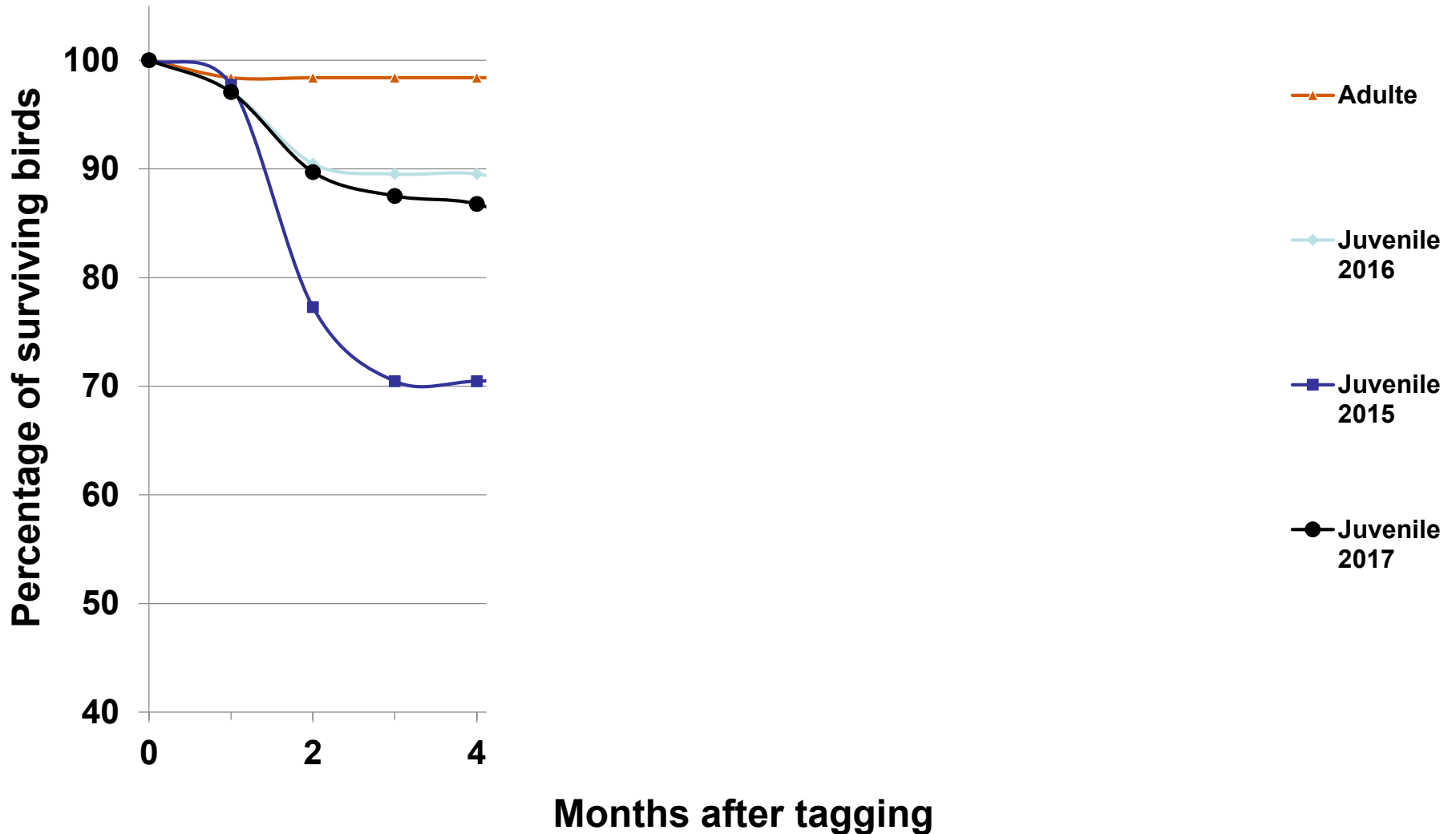


284 juvenile Red Kites tagged and 56 adults (2015-17)

Data: P. Scherler & M. Grübler, SOI



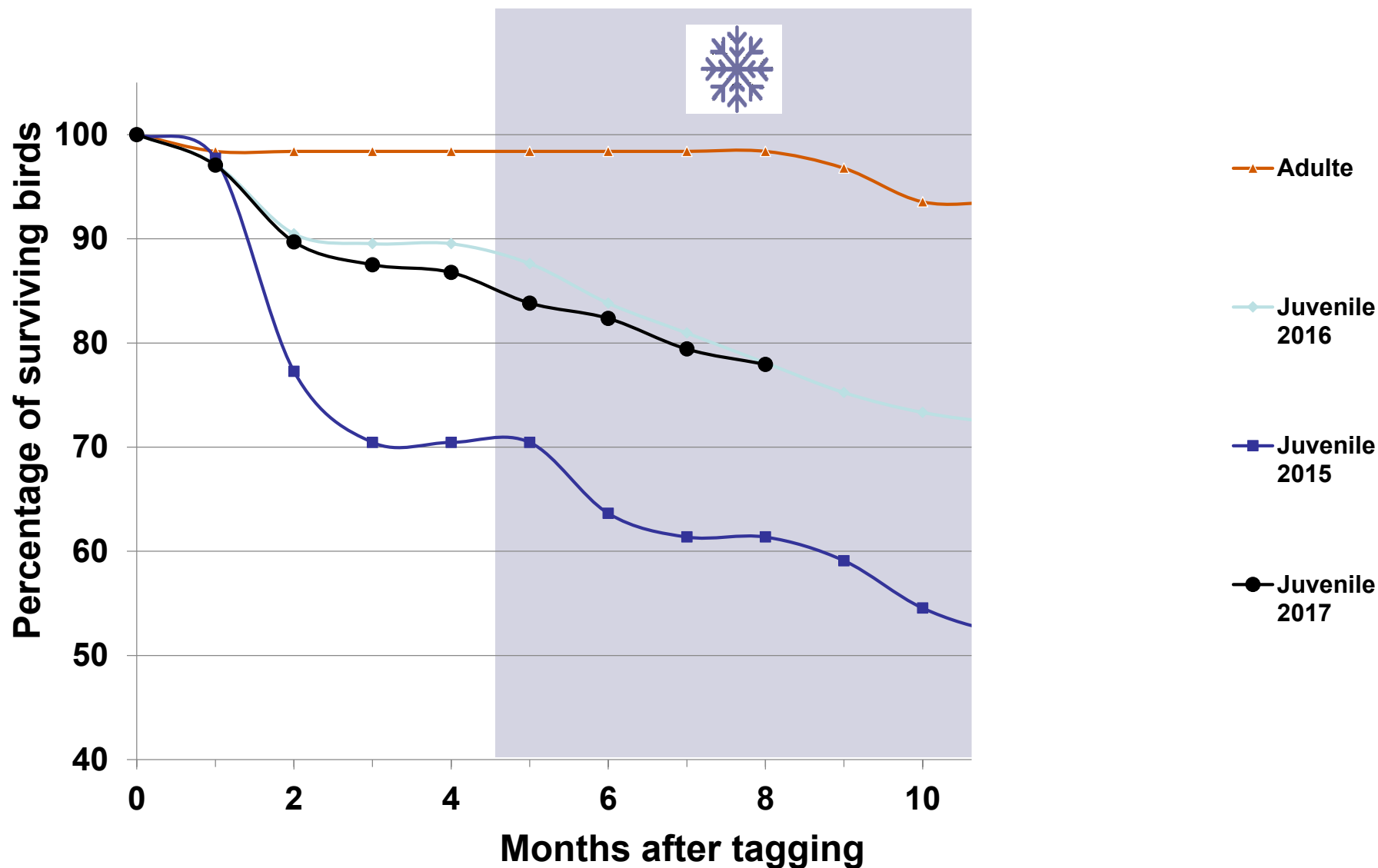
# Survival of Red Kites per month (percentage)





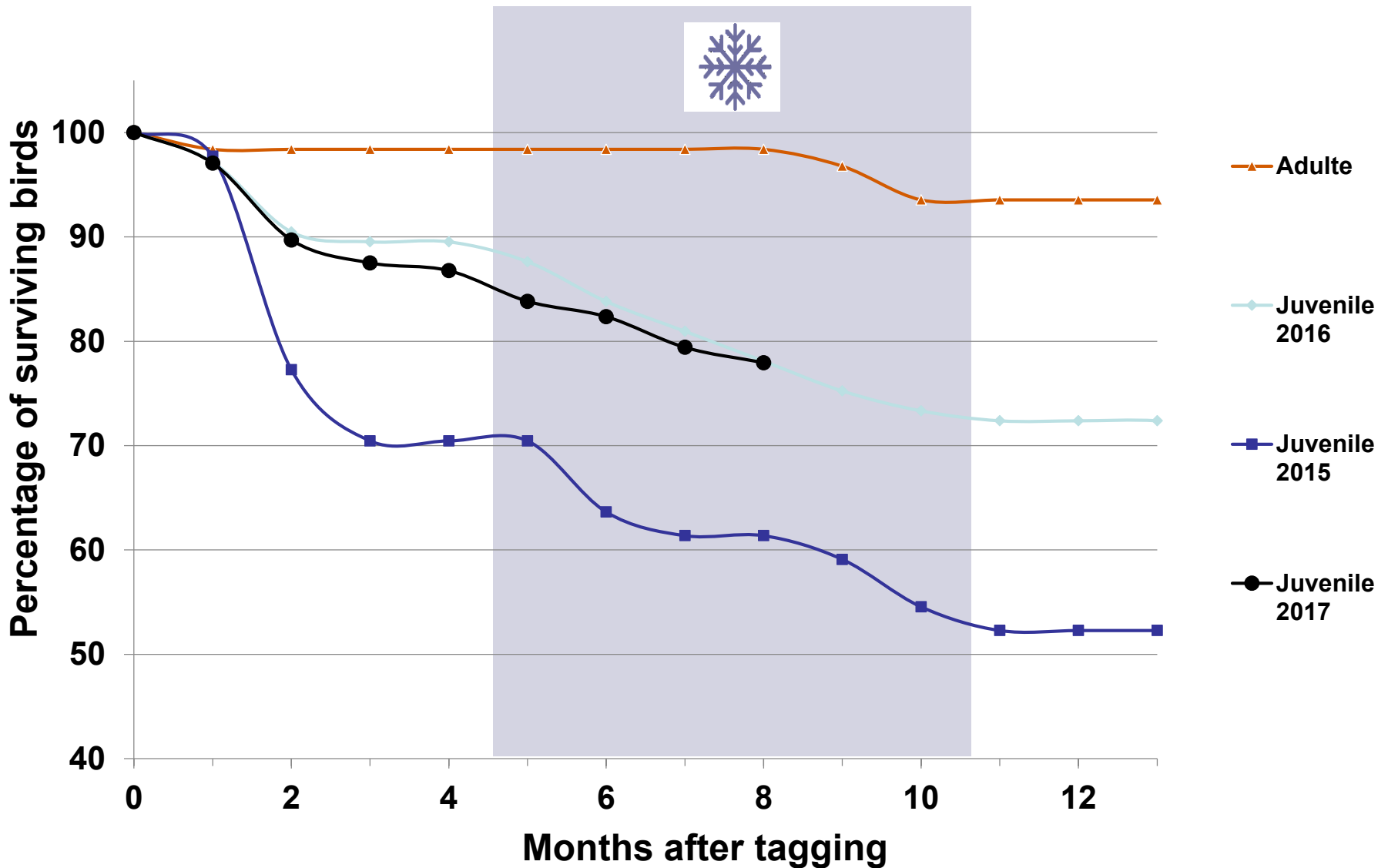


# Survival of Red Kites per month (percentage)





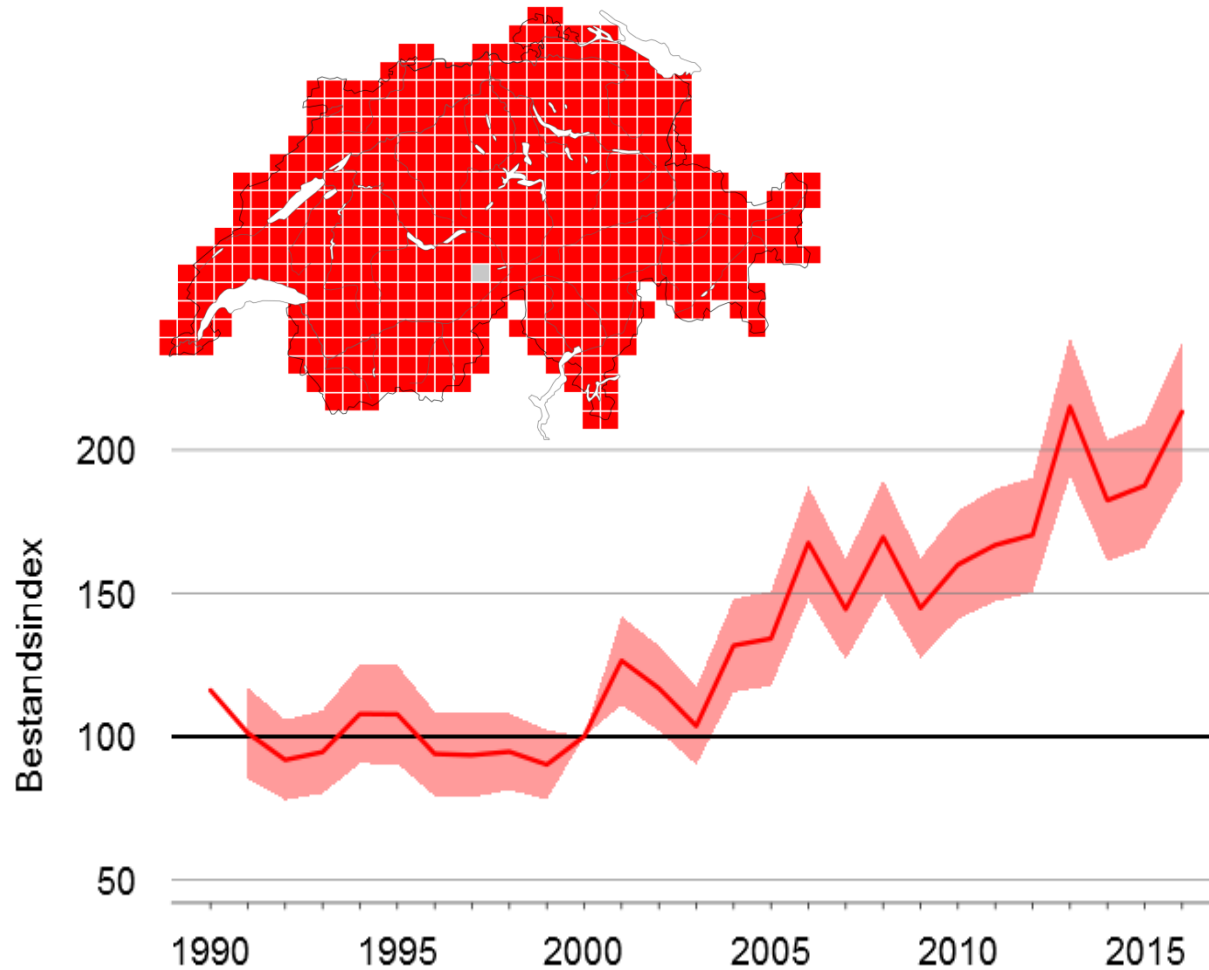
# Survival of Red Kites per month (percentage)







# Common Kestrel – density increase

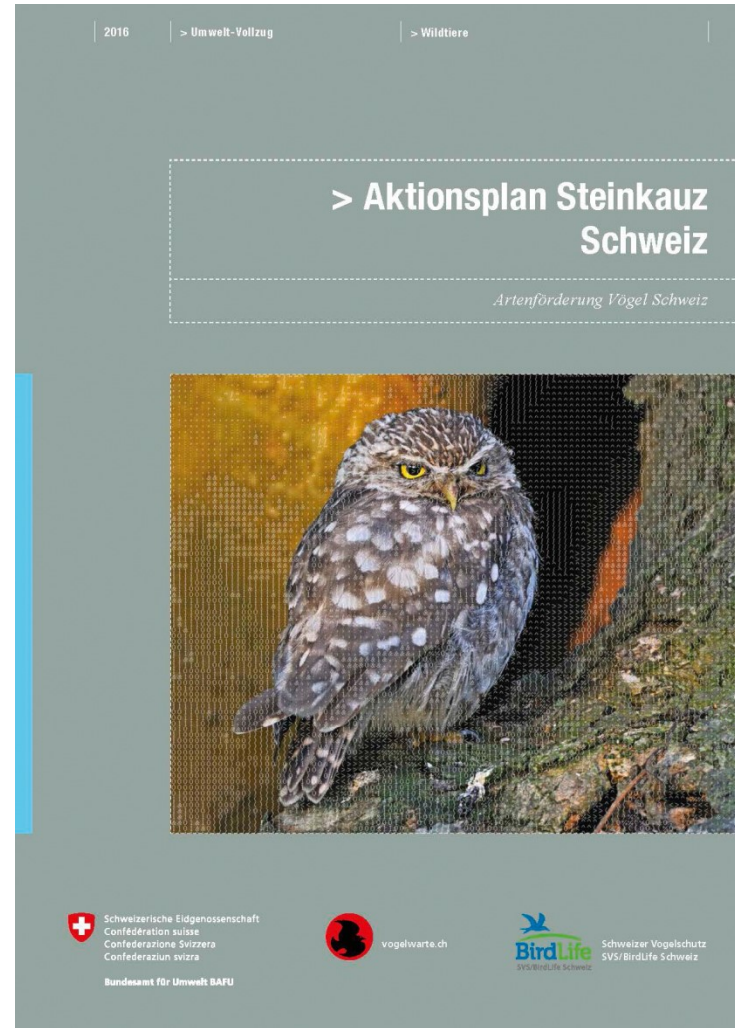


# Protection measures and support





# Protection measures and support





# Peregrine Falcon – Population trend in Western CH (ca. 5000 km<sup>2</sup>)







# Intoxication by pigeons



Neue Zürcher Zeitung

Menü Startseite > Zürich > Aktuell

15 month of imprisonment

## Keine Gnade für Wanderfalken-Hasser

Erstmals verurteilt ein Schweizer Gericht einen Taubenzüchter, der mit sogenannten «Kamikaze-Tauben» Greifvögel jagte. Tierschützer erhoffen sich vom Urteil eine Signalwirkung.

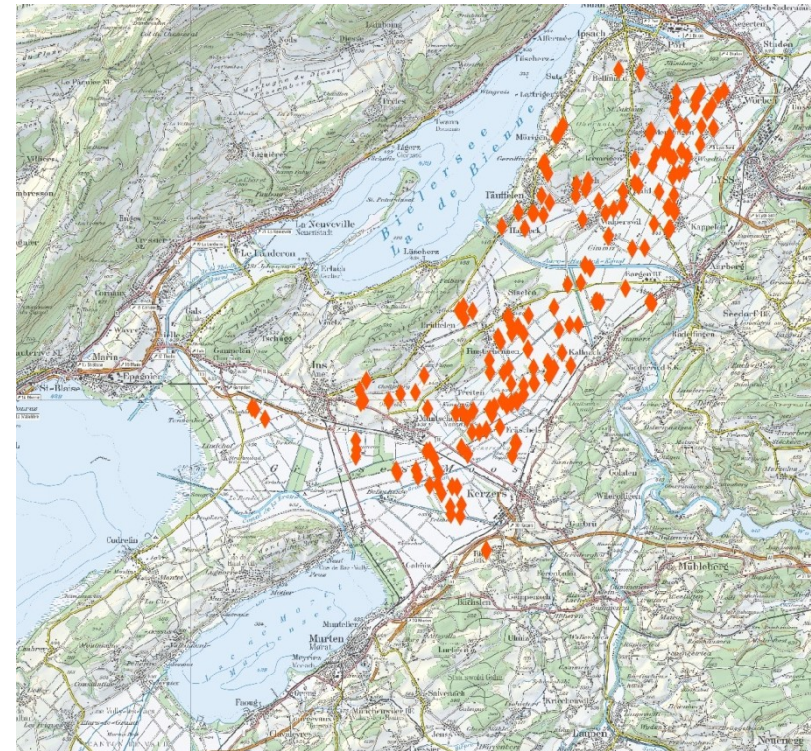
Beide Grün Stadt Zürich





# Research on Raptors and Owls at SOI

- Dispersal  
(Red Kite, Golden Eagle, Little Owl)
- Lead intoxication  
(Golden Eagle, Red Kite)
- Long term monitoring  
(diverse species)
- Species supporting  
measures  
(Scops Owl, Little Owl, Barn Owl,  
Kestrel)



192 nest boxes for Little Owl in “Seeland”

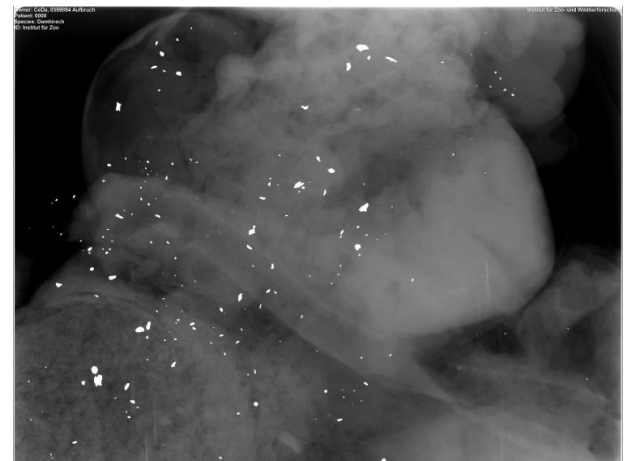




# Challenges

- «Sterile» agricultural landscapes
- Leisure time activities
- Pesticides
- Lead
- Pigeonors
- Planning of Windfarms

Many research programmes at SOI





# Former threats are solved... ... but there is still a lot to be done

- Raptor and owl conservation in Switzerland:  
Strategic guidelines and management priorities for  
Raptors (item 7)