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ALL-EMA - Monitoring farmland biodiversity in grassland and other habitats of the Swiss agricultural landscapes

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Agroscope

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Targets monitoring - evaluation - research



1. Monitoring: State and dynamics of biodiversity in agricultural landscapes.

2. Evaluation: Contribution of the biodiversity promoting areas with direct payments.

3. Research: Enhance the effect of the agro-environmental measures.



Agricultural zones of Switzerland

Lower Mountain area



Upper Mountain area



Summer pasture area



Valley plains



Hilly area





Indicators – reference to agro-environmental targets



- Habitats (~ 40 vegetation types)
- Species (16 organism groups)
- Biodiversity Promoting Areas



HABITATS



- Habitat key for all habitat types (86) in agricultural landscapes of Switzerland
- 40 habitat/vegetation types are listed in the agroenvironmental targets



Mesobromion



Seslerion





SPECIES

- Over 1400 species from 16 organism groups in the agro-environmental targets

Mammals

Birds

Reptiles

Amphibiens

Beetles

Hymenoptera (bees, wasps,...)

Butterflies

Neuroptera

Dragon flies

Orthoptera (grasshoppers, crickets, ...)

Molluscs

Plants

Mooses

Epiphytic lichens

Soil lichens

Funghi



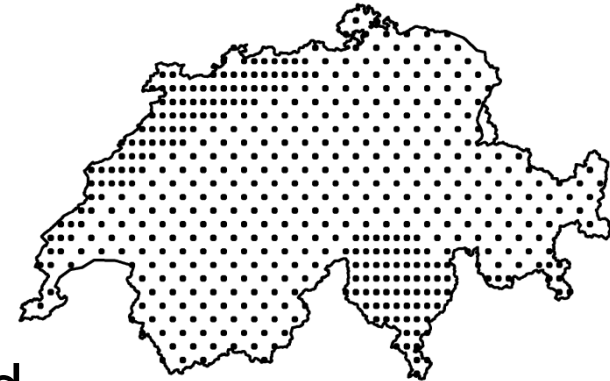


BioDiversity Monitoring Switzerland

Field data recording since 2001
5 year rhythm

Investigation units

- 1500 x 10m² in a systematic grid
- 450 1km² in a systematic grid



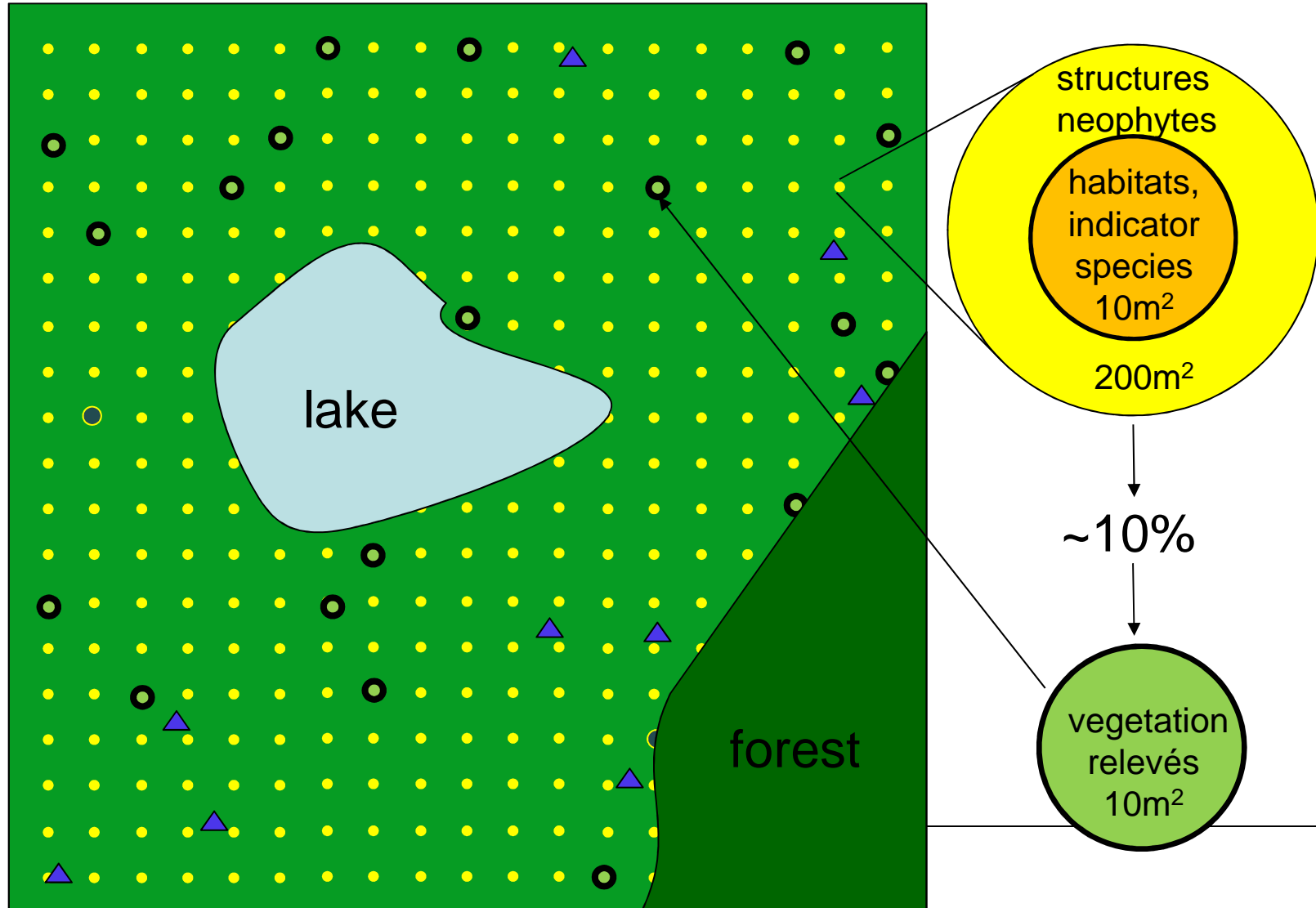
→ Common investigation units of ALL-EMA and BDM



+ 2 organism groups for ALL-EMA

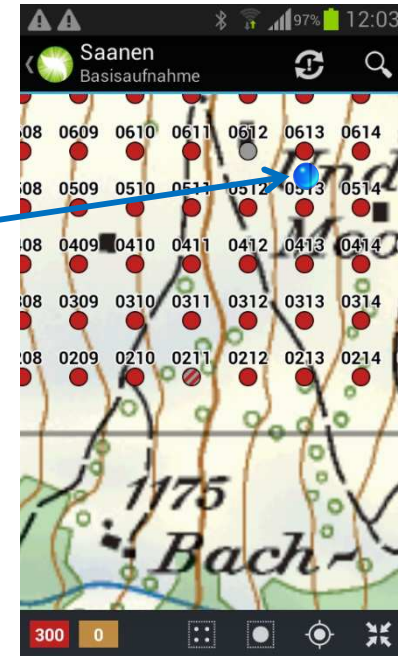


Data recording in the field in landscape units of 1km²





Methods - Data recording in the field

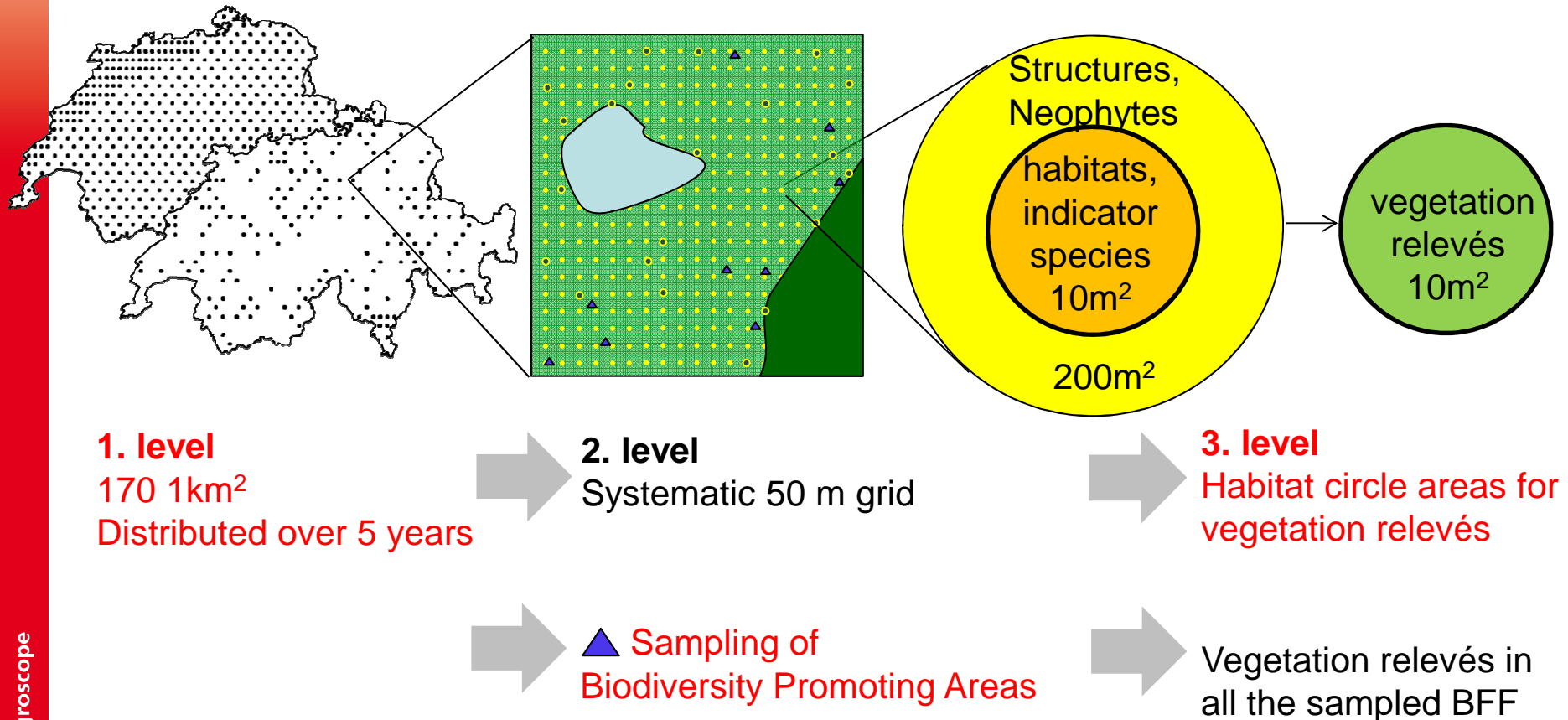


Special advantage:
Sampling of vegetation relevés based on the habitat mapping



Methods - Sampling concept

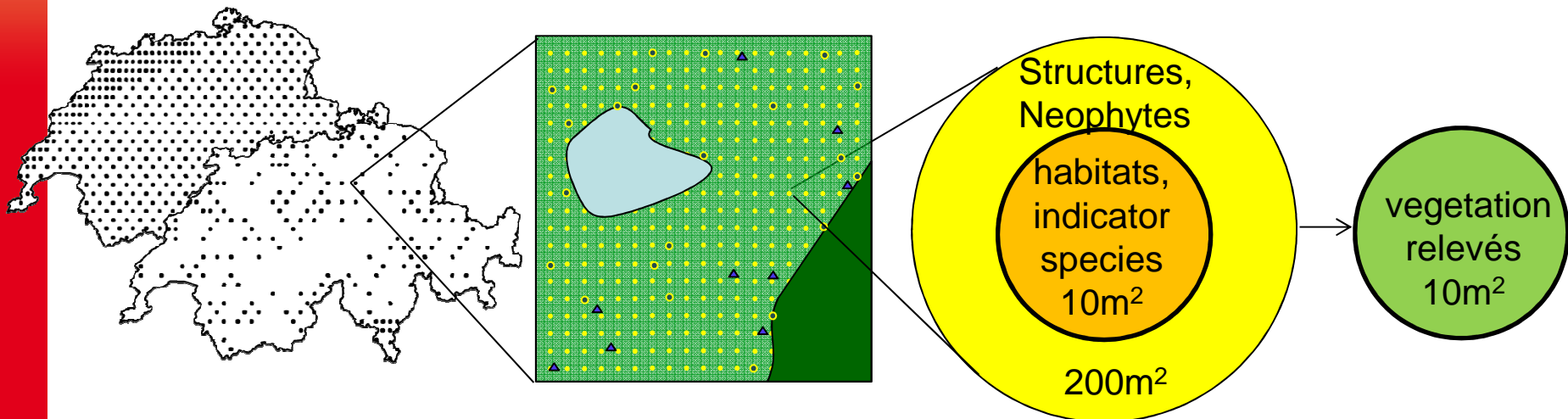
Focus on habitats of interest with weighted sampling





Methods – sample size and effort

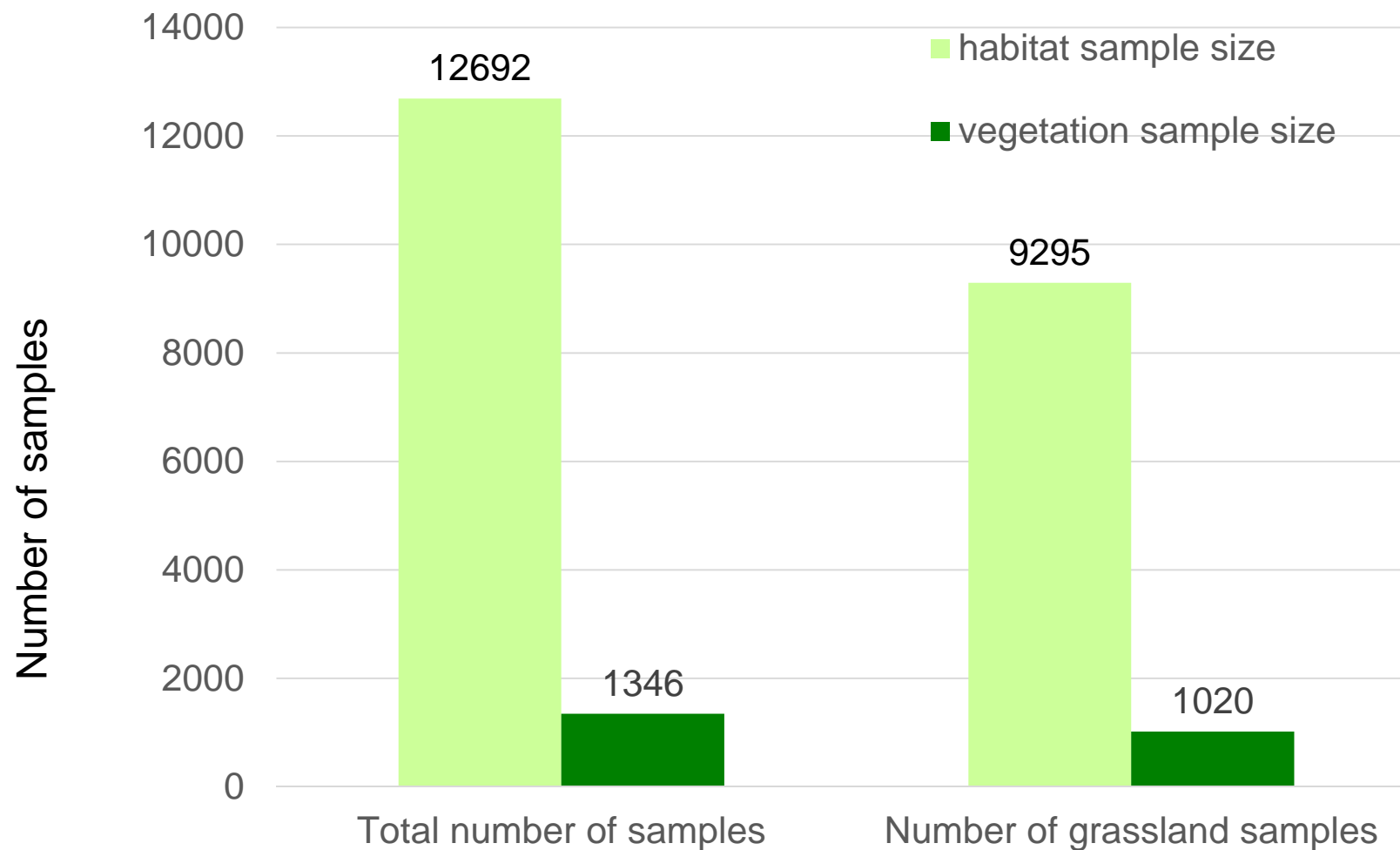
~ 1500 days of field work distributed over 5 years



«N» after 5 years:	170	~ 33'200	~ 3'300
	+ Biodiversity Promoting areas ~ 1'500		

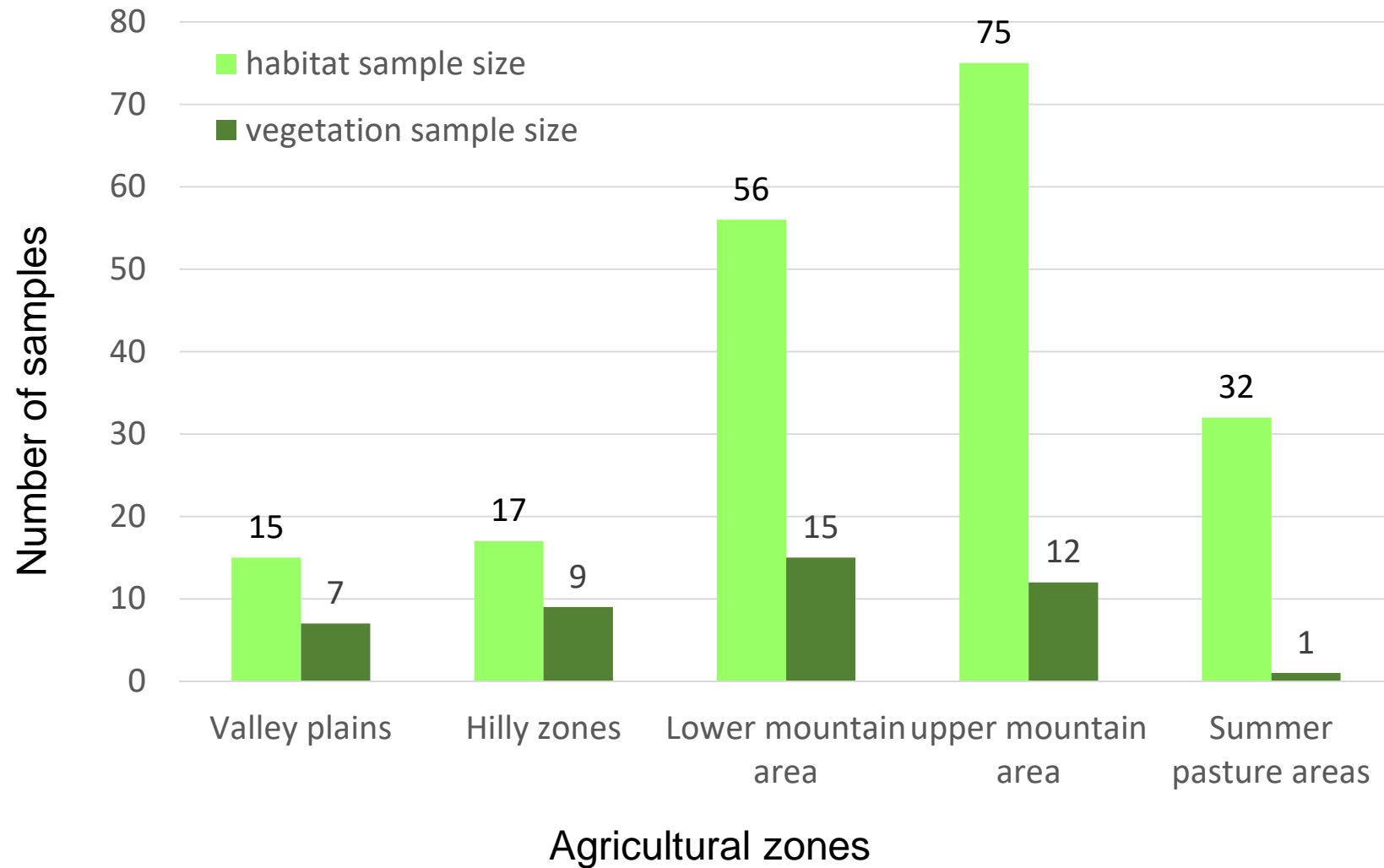


Number of samples after 2 years



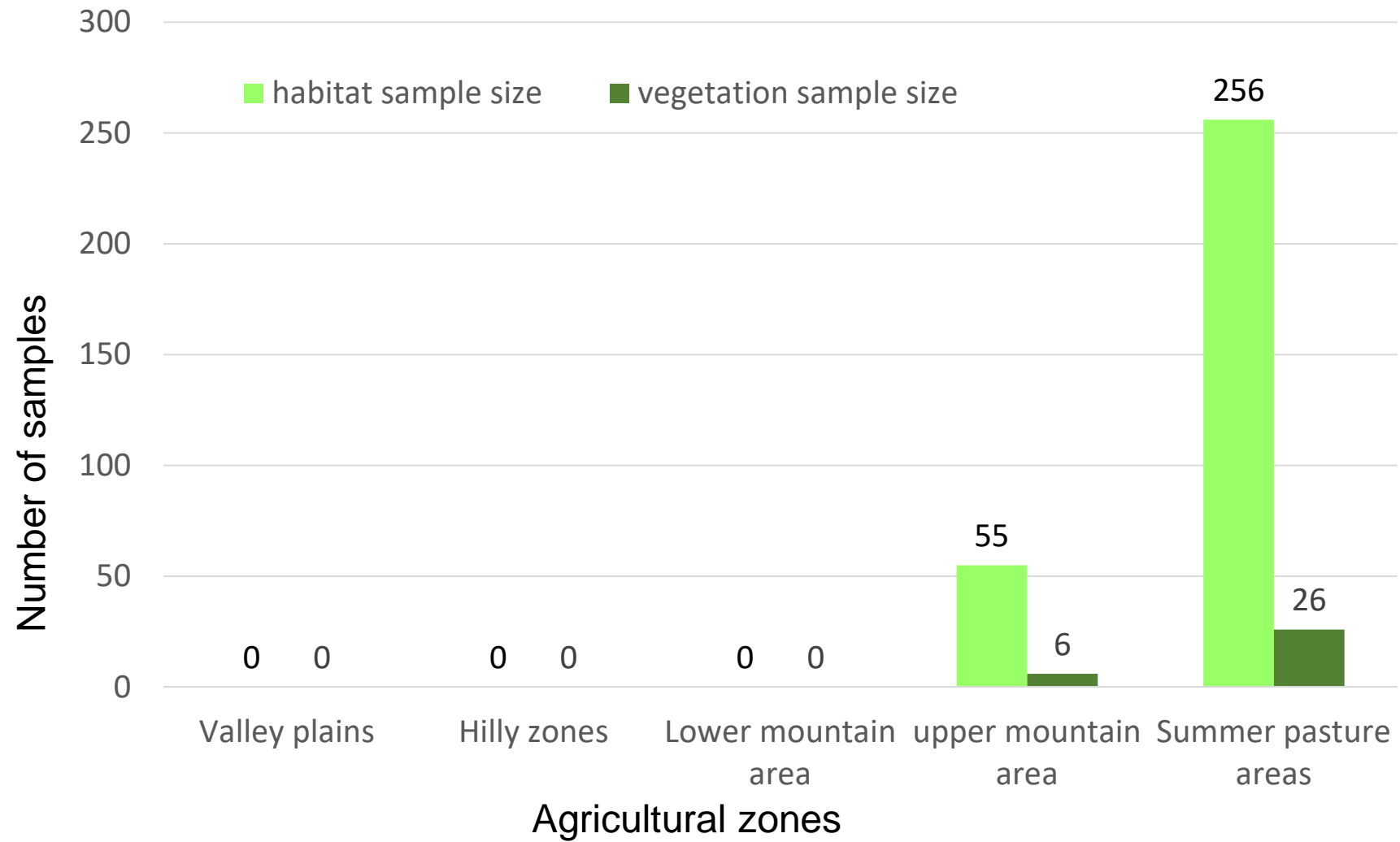


Mesobromion 195/44





Seslerion (311/32)





**For more information about ALL-EMA
in french, german and in english:**

www.all-ema.ch

Thank you for your attention!