Introduction

1. Farmland Bird Index Switzerland
2. Introduction of the Wildflower Strip
3. Development of the Wildflower Strip
4. Effects on Biodiversity
Farmland Bird Index

Swiss ornithological Institute
Species Index

Skylark

*Alauda arvensis*

Index (Jahr/année 2000 = 100)

1729 km²

Swiss ornithological Institute
Grey Partridge

Perdix perdix

Index (Jahr/année 2000 = 100)

Swiss ornithological Institute
Red backed shrike

Index (Jahr/année 2000 = 100)

Lanius collurio


60 80 100 120

Swiss ornithological Institute
Stonechat

![Graph showing population trend of Saxicola torquatus](Image)
Wildflower Strip

Markus Jenny
Wildflower Strip: Introduction

Wildflower Strip

• In the 1990’s. Testing of different seed mixtures. Aim: native seeds of regional origin, high diversity, no undesirable plants, promotion of «beneficials», price 
  → Now only seed mixtures that are recommended by the federal research institute can be applied

• On many sites, spontaneous greening was not successful: missing seed stock of annual archaeophytes, more «bad» weeds, less diversity

• Seedmixture differentiation on soil conditions has not been implemented for reasons of cost. This has been partly compensated by a wide variety of plants in the seedmixture
Wildflower Strip
Two Types:
• Wildflower strip of 2-6 Years
• Wildflower strip of 1-2 Years (Rotational Strip)
Around 25 plant species in Seed Mixture
Wildflower Strip: Development

Wildflower Strip

Area (ha)


- total
- type 1
- type 2
Reasons for this development:

- From 1999 on 7% of each farm had to be managed as ecological compensation areas (ECA)
- In the time of overproduction, low prices and a reduction of protection of the inner market, the wildflower strip was a good alternative (similar to set asides in the EU)
- Then intensification in animal production, supported by high and unspecific «production orientated» payments (e.g. the more cows, the more payments) making the payments for wildflower strips less attractive
- Labelled as «wildflower strips can not be eaten» and «pest plant promoter» = bad image amongst conventional farmers
Today wildflower strips make up only 0.6% of the surface of arable land

ECA of high quality make up only 0.64% of the surface of arable land

Biodiversity deficit is highest on arable land

What needs to be done:

- Install a more biodiversity friendly policy system
- Increase monetary incentives for ECA’s in arable land
- Introduce more ECA’s for arable land
- More consultancy (has proven to be very effective)
Wildflower Strips: Effects on Biodiversity

Development of the proportion of wildflower strips per field area and territory density of melodious warbler, stonechat and common whitethroat from 1991 to 2003 in Laconnex GE.

Kohli, L. et al 2004
Wildflower Strip: Effects on Biodiversity

Results of Studies

- To halt and reverse population declines of arable farmland species in Switzerland:
  - On landscape level, a minimum area of 14% of high-quality AES and semi natural habitats is needed
  - Of which 7% should be wildflower strips

Basil Bornand
Thank you for your attention