





- Feral populations are well adapted to their environment
- Feral populations are widespread in Europe, but largely ignored
- Knowledge about the situation of the feral populations is widely missing
- Managemant plans are missing in many cases
- ➤ Often feral populations are seen as a disturbance of agriculture



8. SAVE-Seminar on Agrobiodiversity "Agrobiodiversity and Nature Conservation", Lonjsko Polje, Croatia 18. September 2014





Importance of Feral Populations

- ➤ Genetic resource
- > keep some rare breeds alive
- > perfectly adapted
- > Large herbivores for conservation grazing
- > Science: ethology, population dynamics,...





Nature Impact of Feral Populations

- > return to the "wilderness"
- semi-wild livestock management of large protected areas
- > Impact on the ecosystem
- > Impact of Dung
- Impact of grazing
- > Impact of their footsteps



Common Problems



- > diseases and prevention concepts
- Registering (traceability)
- ➤ Herd management control of population
- >Animal welfare
- > Environmental protection and impact
- Forest grazing
- > Water protection areas
- **>**Slaughtering
- ➤ Public acceptance





Information Plattform and Database

Regional N	IGO Net	works for	Agrobiodiversity			
A Service of the European						
Feral Populations	3					
The project is kindly sup	ported by: Margare	the & Rudolf Gsel	I-Stiftung, Basel; Pa	arrotia Stiftung, Zurich (bot	h Switzerland) and Gerda Techow Stiftung, Vadu	ız, Liechtenstei
Feral Populations: Breed	ds and Occurrence	in Europe				
Search Feral Population If you don't select anythin			he menu or click or	a picture to search the sp	ecies.	
Search Breed						
Select species:		Select coun	tries:	7		
All Species		All countries	•			
Select Managemen	nt typ:	Search for "Bree "Local name" o		杨醇类	EQ I	
SEARCH	•					
Thumbnail	Country	Species	Local name	Location	Description	
Mary Control	Austria	Pig	Güssinger Waldschwein	South Burgenland	This pig breed once was bred from wild boar and domestic pigbredds "Duroc" and "Schwabisch-Hallische	
	Belgium	Cattle	Heck Cattle	Parc animalier de Bouillon, SW Belgium		





Regional NGO Networks for Agrobiodiversity

A Service of the European SAVE Foundation

Feral Populations

Livno wild horses

Breed: no

D	0	ta	il	C	۰
u	c	LU	**	9	٠

Country	Bosnia-Hercegovina, BA			
Location	Mountains 10km north of Livno			
Species	Horse			
Management	feral			
Population size	100-200			
History	Living free for 50+ years, but also horses left free during the Balkan wars in the 1990s			
Need for Action	feeding in winter			
Contact	NGO Vodomar Davorka Kitonic Crepina2, 20355 Opuzen, Cro crepinaatgmail.com			
Remarks	the horses are under control of the rangers of the livno region			
Source of information	http://www.divljikonji.org/			

Livno wild horses free ranging spring 2013





http://www.divljikonji.org/, http://www.facebook.com/divljikonji/photos

Livno wild horse

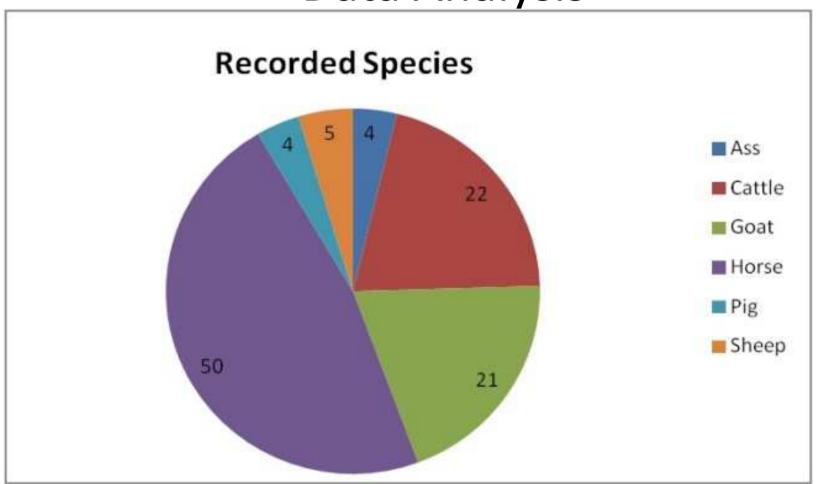




http://www.save-foundation.net



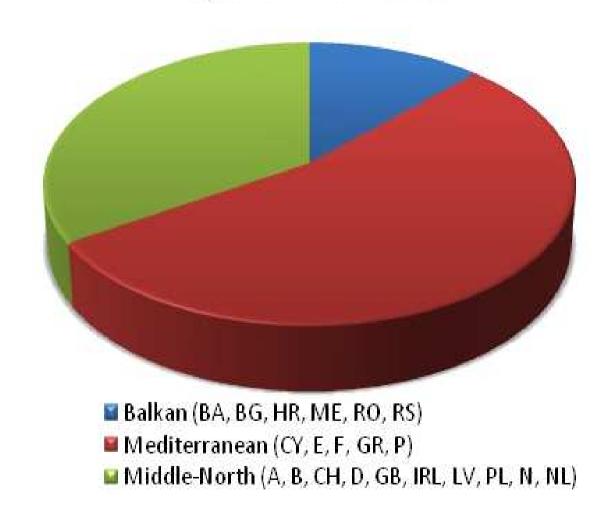
Data Analysis





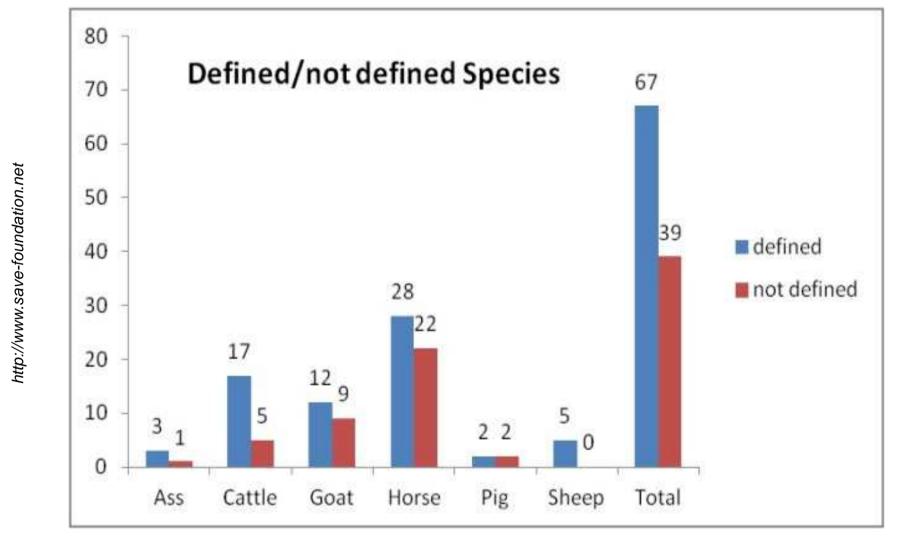


Regional Distribution





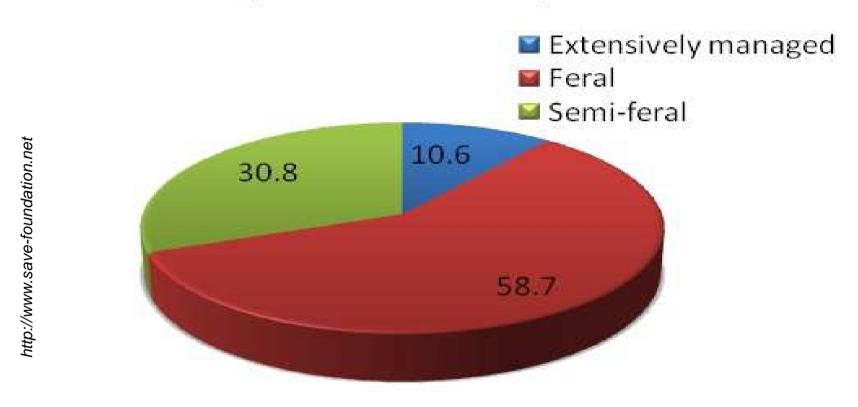








Management of Feral Populations in %







Environmental Protection and Effects













Forest grazing







Fire Defense





Pros	Cons
Genetic resource	No public acceptance or awareness
Adaptation to marginal locations	Poor reputation due to conflicts with e.g. agriculture
Robust (can often recover from infection without medical attention)	Spreading of disease
Objects for scientific study (e.g. Behavioural studies)	Not registered
Nature conservation through large herbivores	Lack of understanding among nature conservationists and public
"Furnishing" the landscape is attractive for tourism	Lack of public acceptance of the importance of secondary aspects such as dung, carcasses and young animals as prey.
Ecosystem services	Largely ignored
Quality meat that is rich in Omega 3 fatty acids	Human consumption of meat forbidden due to lack of traceability





Management; Basics

Habitat	Horse	Donkey	Pig.	Goat	Sheep	Cattle	Buffalo
Salty grasland	٧		٧		٧	٧	
Dunes	٧	٧	٧	٧	٧	٧	
Heathland	٧	٧	٧	٧	٧	٧	
Oligophilic grassland	٧					٧	
Wetlands	٧		VV			√ √	VV
Mesophilic grassland	٧٧		٧V	٧	٧	₩	٧
Dry grasland	VV	VV		VV	VV	٧	
Scrubland	٧	٧	٧	VV	٧	√√	٧
Stony land		٧		VV	٧		
Sandy soils	٧	٧	٧	VV	√√	٧	٧
Shrubland	٧		VV	VV	٧	٧	٧
Leafy mixed forest	٧		VV			₩	
Deep leafy forest			٧				
Pinus forests	٧					V	





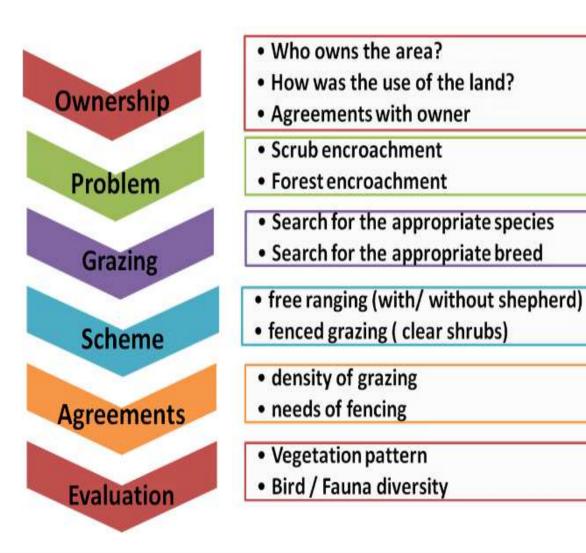
Needs and Characteristics

Species	Shelter	Shepherd/ Warden	Predator Protection	Winter feeding	Grazing/Browsing	Special needs	Together with	Problems
Cattle	Simple, dry area for lying down	Warden	No	Yes, in snow	Mesotrophic grazing	Parasite control	Horses	Trampling
Horse	Simple, dry area for lying down	Warden	No	Yes	More selective than cattle, bite damage on trees (not shrubs)	Plenty of space	Cattle	Dung in one place
Water buffalo	Simple, dry area for lying down	Warden	No	Little	Rough grazing	Wet areas, open spaces, forest	Cattle	Eutrophication
Donkey	Simple, dry area for lying down	Warden	No (can be used as predator protection)	Little	Rough grazing, salty grazing	Ideal in dry areas, need hard surfaces	Cattle, Sheep, not horses (cross- breeding!)	Do not eat bushes
Sheep	Simple, dry, warm	Shepherd	Yes	Yes	Close grazing	Shearing, Parasite control	Donkey	Non-selective grazing
Goat	Simple, dry area for lying down	Shepherd	Yes	Yes	Grazing and browsing, selective, bite damage, can also digest "poisonous" plants	Ideal in mountains, stony areas	Not sheep (parasites)	Can only be used for short periods
Pig	Simple, dry, warm	Shepherd	Yes	Yes	Omnivores In forest grazing, foraging	Mud baths	All	Cross- breeding with wild boars and transmission of disease therefore fencing at periphery





decision making process







Framework for a Management Plan

Specific problem (to be solved or to be avoided):
Country:
Habitat:
Area (ha):
Carrying capacity* (LSU/ha**):
Is there:
Shelter: yes/no Shepherd: yes/no Warden: yes/no Predators: yes/no Predator protection: yes/no Winter feeding: yes/no Water – Summer: yes/no Winter: yes/no Habitat only suitable for seasonal use (e.g. summer grazing): yes/no Other
Will breed have desired impact at that density? If no, think about species combinations!
Key:
*Carrying capacity Karst (Habitats Directive "conservation of natural habitats and of wild fauna and flora" Council Directive 92/43/EEC): up to 0.6 LSU/ha
**LSU $-$ Livestock Unit. Dairy cow = 1, Cow with suckling calf = 0.9, heifer or steer up to years = 0.5, Brachycerous dairy cow = 0.5. Horse = 1, Donkey = 0.4, Sheep and goat = 0.3 Water buffalo = 0.7, Pig = 0.25





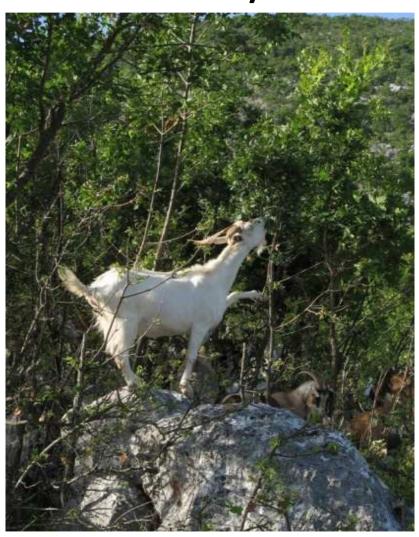
Sources of Information

www.agrobiodiversity.net
www.arca-net.info
www.elbarn.net





Thank you



Photocredit: R. Ozimek