

How can global warming be stopped, how the production of greenhouse gases reduced? Both are questions intensively discussed, and particularly the youth appeals to preserve our miraculous planet for the coming generations. During the evolution plant species have adapted to most different habitats. The rapid global warming changes their habitat in never known velocity, so that a big part of the species is threatened by extinction, and only migration might rescue them. In evolution plant species made use of herbivores to change the habitat: **Herbivory brings biodiversity!**



Transhumant sheep and monitoring herders helped to create Europe's biodiversity. Several millenniums of roaming sheep enhanced the Iberian Peninsula to a most remarkable hot spot of herb species. Sheep are carrying up to 10.000 seeds in their fleece and they ingest daily up to another 4.500 seeds. A flock of 500 sheep is able to be seed-taxi for more than 5 million seeds!

Inundation disaster in the Upper-Rhine-valley Heaviest Drought in Living Memory Heat wave provokes wave of fatalities Climatic capers end in European famine

Are this the headlines of coming 21st century? Only 50 years of peace and climatic favour at the end of the 20th century have guided human beings to the border of a climatic disaster. Daily we get known of notices of break-away of an big iceberg, of melting glacial, of disasters of inundation, IPCC-scientists have correlated the phenomena with the continuous global warming.

Climate change concerns us all!

The aim of the politicians is to limit global warming on 2,0°C. Scientists doubt in succeeding this. Political and national egocentrism assume to fear the worst: global warming of 6.4°C will end in the massive extinction of species and most of existing ecosystems, it keeps arguable:

„Human still can be rescued ? “

Impressum

This flyer was created in the frame of the TRUNPA-Project - Transhumant Rangeland Use and Networking of Protected Areas - being designed by

HBB-consult – Herbivory Brings Biodiversity

Ascheberg i.Westf. 2009

Climate Change and the Threat of Biodiversity



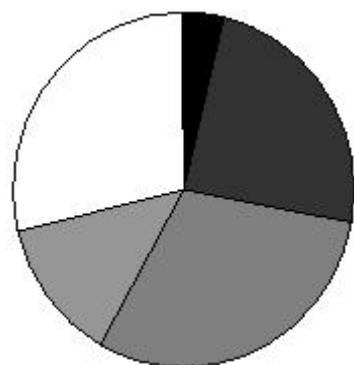
TRUNPA Rescues Nature



www.trunpa.eu - hb@trunpa.eu - gb@trunpa.eu

Threat of biodiversity

no migration of plant species



■ extinct

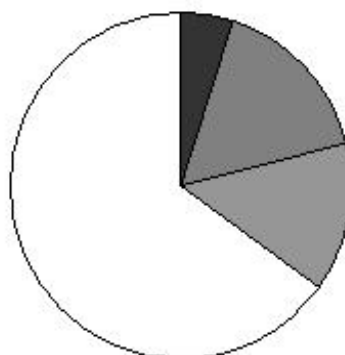
■ critically endangered

■ endangered

■ vulnerable

□ lower risk

full migration of plant species



Quelle: Thuiller, et al. 2005. CNRS (National Center for Scientific Research), Grenoble.
<http://www.pnas.org/content/102/23/8245/F1.expansion.html>

Threat of plant species in 2080 classified according to the IUCN Red List

referring to ICCP-scenario A1 HadCM3 under two extremes assumptions about species migration
 (Migration = 0 versus Migration =1)

The figures demonstrate the significance of migration for the preservation of plant species diversity. The proportion of endangered species decreases about 30% if full migration is facilitated. If sheep are employed as diaspore-vector as well as a network of protected areas is optimized, there will be able to preserve one third of European flora. Thus emerges that Transhumant Rangeland Use (by sheep) and

Networking of Protected Areas (TRUNPA) is realized as a most efficient tool to preserve biodiversity.

Biodiversity is basic element of planet's future. We must protect it by re-animating species migration. Transhumant sheep not only have been first visitors of new-born Jesus, nowadays they serve as rescuer of biodiversity.

TRUNPA points this out and wants to

- suggest roads of drover roads;
- form consciousness (*environmental gender*);
- initiate an international sheep-relay with thematically events (*pilot-project*);
- modern modification of the herder;
- political empowerment of project aim;
- herder's Nachwuchs.



TRUNPA shows a way to the future as it

- elucidates (ecological awareness, scientific investigation),
- links (protected areas, herders & farmers, society & nature),
- integrates (industrial society in ecosystems & co-evolution),
- protects (biodiversity on several levels)

Environmental consciousness has to be refloated to give the future to our children

Let's do TRUNPA!