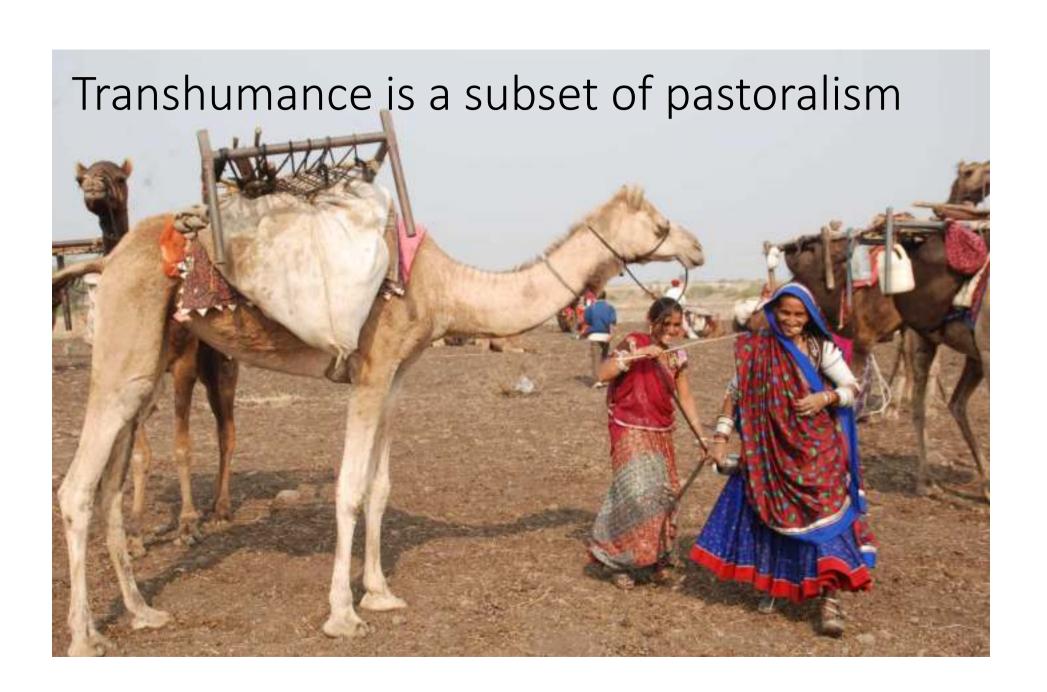


Summer School on Mountain Eco-systems

24.9.2021

Ilse Köhler-Rollefson

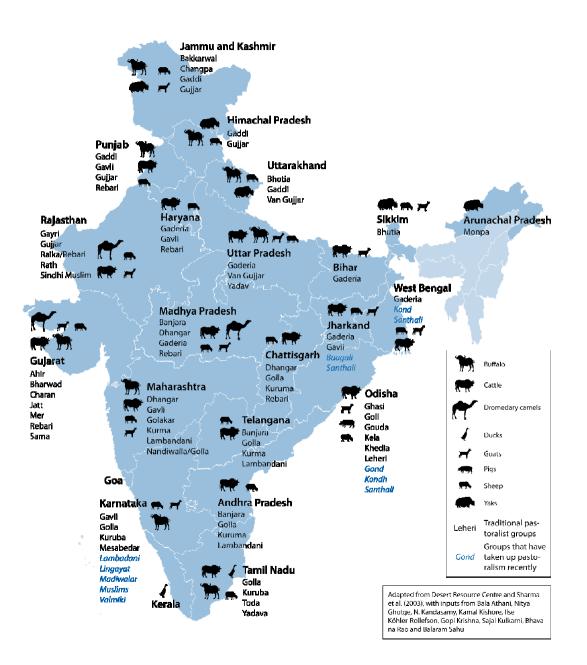






India is a collage of pastoralist cultures, most of them agropastoralists

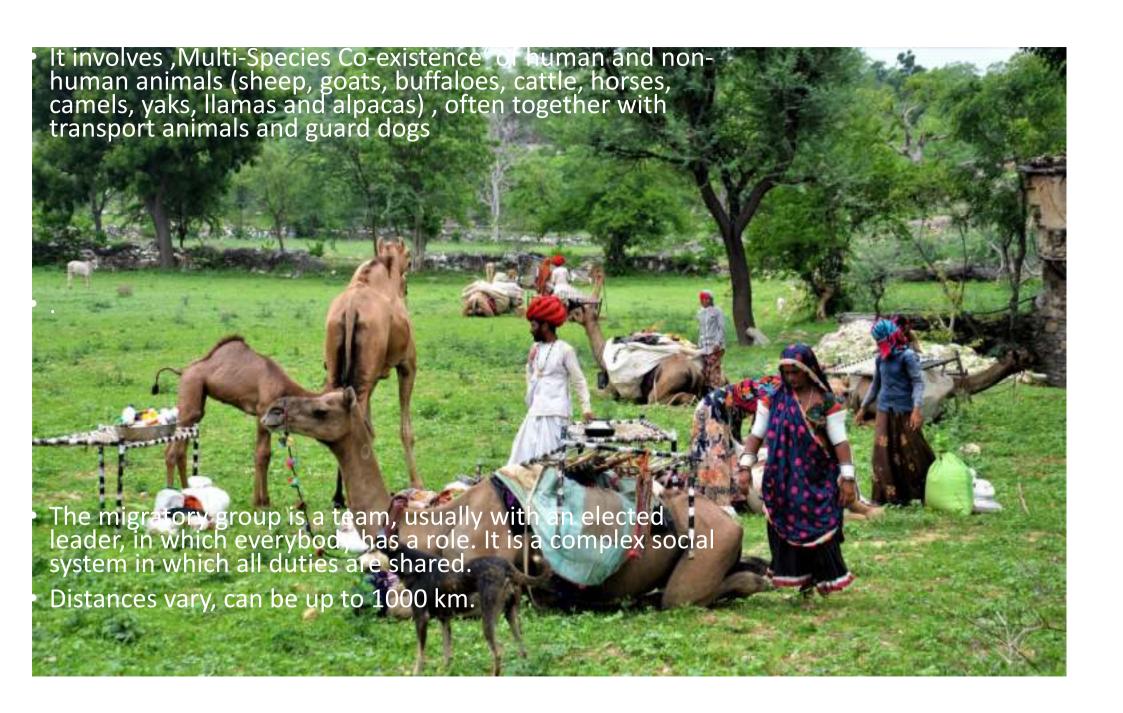
Prevailing perception: "India is land of ,farmers'."





- Derived from ,Trans' (across) and ,Humus' (earth)
- Seasonal movement of people and herds between summer and winter pastures at different altitudes – in mountainous areas
- Or between monsoon and dry season grazing areas





Why do people go on transhumance?

- Increased herd productivity (more milk and higher fertility). Intervals between births is less in transhumant herds than in sedentary herds.
- Enables higher number of animals than if kept year-round in sedentary systems.
- Low production costs
- Products of animals that walk and exercise are healthier and taste better.
- Herds want to move and become difficult to restrain in one place.

Example: Spain

- The country with the best documented system of transhumance.
- Herds move on drove roads' ('vías pecuarias' or Canadas) that were established ca eight centuries ago and protected by royal decree. They are between 20 and 70m wide, cover about 1% of Spain's surface and are 124,000 km long or 8-9 times the length of Spain's current railway system.
- They fell into disuse in the early 20th century, when it became possible to transport flocks by train.
- In 1995, Spain passed new legislation to protect the network.



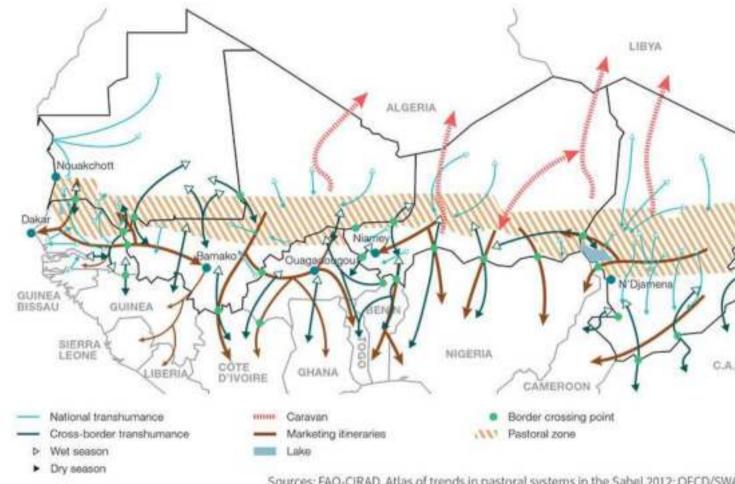


Transhumant pastoralism in the Sahel and West

Africa

• involves 70-90% of the Sahel's cattle and 30-40% of its sheep and goats. It is the only activity that valorises the area.

 protects the environment and is profitable and supplies about 65% of cattle meat, 40% of mutton and goat meat and 70% of milk.



Sources: FAO-CIRAD, Atlas of trends in pastoral systems in the Sahel 2012; OECD/SW/

Extract: OECD (2014), An Atlas of the Sahara-Sahel: Geography, Economics and Security, OECD Publishing, Paris.

© 2014. Sahel and West Africa Club Secretariat (SWAC/OECD)

Ecological benefits

- Follows ancient routes of wild herd animals
- Connects ecosystems for genetic exchange
- Transports seeds, insects and other small animals, so enables adaptation to climate change.



Our most loved landscapes have been created by pastoralists.

• Source: https://reisen-nach-spanien.com



Dehesas in Spain and Portugal



By Willow - Own work, CC BY 2.5, https://commons.wikimedia.org/w/index.php?curid=2579877

Lüneburg Heath in Germany

Manure is hugely important at the bottom of the food chain





https://commons.wikimedia.org/wiki/File:Flightless Dung Beetle Circellium Bachuss, Addo Elephant National Park, South Africa.JPG https://commons.wikimedia.org/wiki/User:Kayafrica





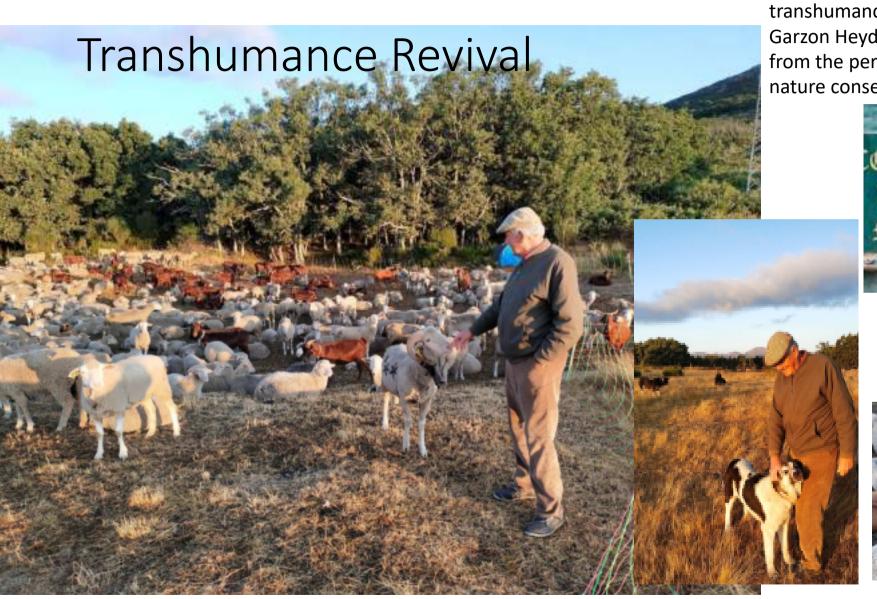
Insect conservation

- Mechanical mowing kills up to 80% of cicadas
- **Grazing conserves insects**

Recent research in Germany makes the mowing of grasslands responsible for the dramatic loss of insect, bird, amphibian and reptile populations

> Nickel, H. 2017. Evolution im Naturschutz: Von der Weide zur Wiese und zurück?

https://www.bfn.de/fileadmin/BfN/ina/Dokumente/Tagungsdo ku/2017/02 Nickel Wiese oder Weide.pdf

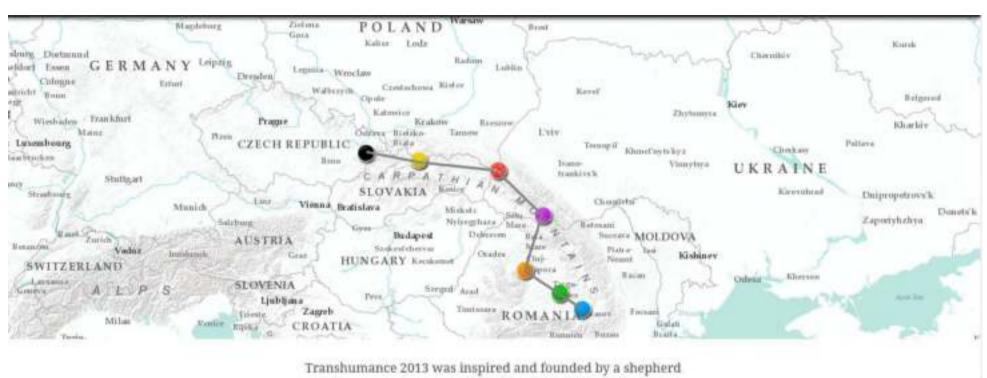


The pioneer of reviving transhumance: Jesus Garzon Heydt – coming from the perspective of nature conservation



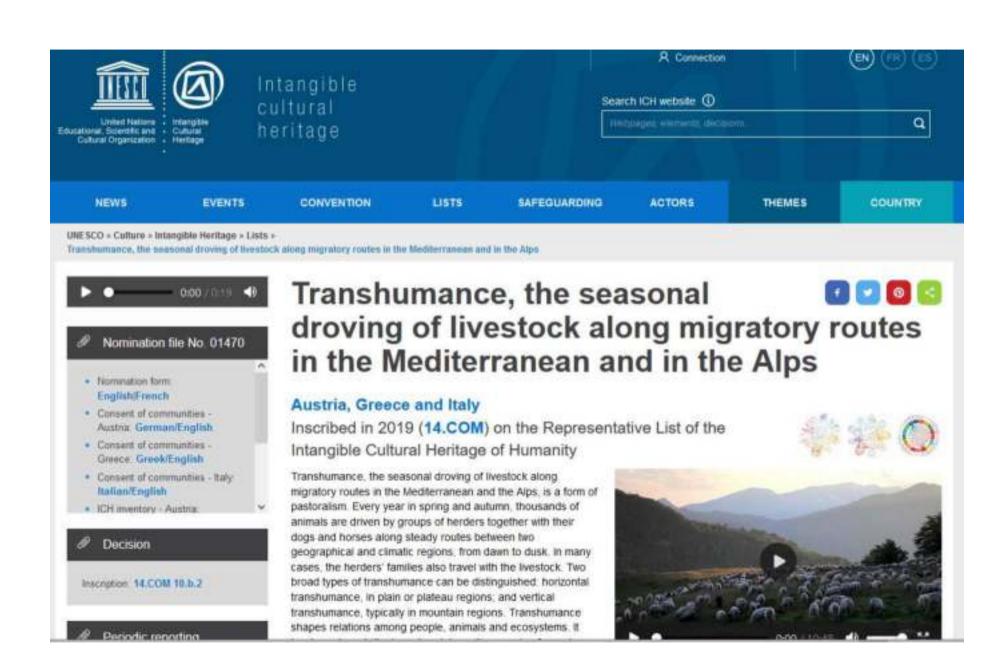


Carpathians



Transhumance 2013 was inspired and founded by a shepher Piotr Kohut from Koniaków village in the Silesian Beskids, Poland.

Dreamed up by one person, the Transhumance became a massive event with shepherds wandering with their sheep





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Transhumance as Antidote for Modern Sedentary Stock Raising*

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ABSTRACT

ficular the routes animals travel, often stretch across varied land ownerships, and sifting out rights of passage is grounds, common diseases, and cycles of drought or drenching rain. Movement at whatever scale permits herders or shepherds an escape from monotony when they shift grazing grounds to montane-woodlands or nomic and ecological advantages accrue from the shifts of seasonal silvopastorialism, but the terrain, and in paran ethnographic adventure requiring longstanding observation and consistent fieldwork. Formal scholarship about the road between is less established than literature of "the trail," which is a staple feature of folklore, film, and fiction. As concern grows about the energy costs of using highways or railroads to move livestock, atrention returns to traditional practices and legal accommodations that make possible trailing livestock under their own power. Across Europe are 4 million ha of land associated with livestock driveways, once widespread in ment in two landscapes: Spain and, secondarily, the western United States of America, with an overarching rent-day livestock grazing routes; stuck driveways, Excursions from one bionne, ecotione, or landscape to another in general, undertaken to seasonal cues — allow livestock owners and their hired herders to exploit different environments that offer notable advantages in terms of freeing livestock from unvarying diet, overtaxed grazing back to lowland environments in travel that benefits both jaded humans and husbanded animals. Significant ecothe United States as an item of Spanish-Mexican heritage. This synthesis focuses on livestock driveway establish theme of how stock driveways can connect ecosystems and, by sustaining customary use, knit together New grazing themes so endure yet are so difficult for outsidess to document with certainty as historical and cursilvopastoral society.

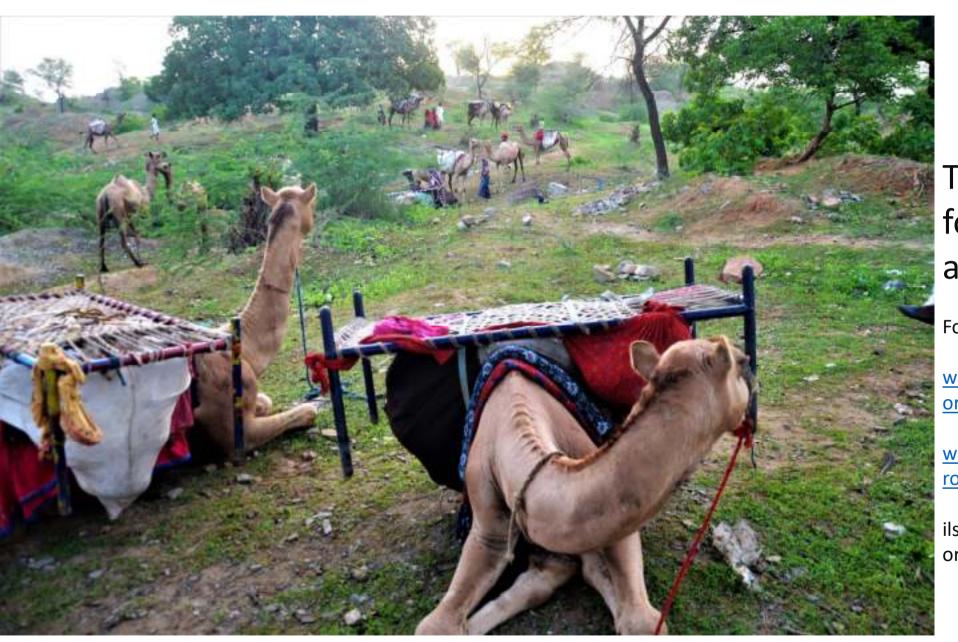
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It keeps groundwater clean and integrates with wildlife







Thank you for your attention!

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