

Accounting for pastoralists in Germany



Photo: Birgit Czerkus

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IN GERMANY, THERE are three types of pastoralists: transhumant shepherds, shepherds doing location-bound herding, and alpine herders or farmers. Mobile shepherds are generally called *Wanderschäfer* in German.

■ **Transhumant shepherds** move their flocks of sheep, sometimes mixed with goats, over long distances between their winter and summer pastures; these may be over 200 km apart. This form of pastoralism occurs mainly south of the River Main.

■ **Location-bound herding** prevails on the permanent grasslands of northern and eastern Germany, but is also found in other regions. Flocks of sheep, mixed flocks, or sometimes herds of goats, are herded in a more or less wide radius around the home-
stead; in winter they often graze on harvested fields. Some location-bound shepherds have specific winter and summer grazing grounds or routes, but distances are usually not as great as with transhumant shepherds.

■ **Alpine or mountain farming** (German: *Almwirtschaft*) refers to a type of extensive agriculture in the far south of Bavaria. In late spring or the beginning of summer, all animals in a region destined for the mountains are driven together up to their alpine pastures (known as *Alm* or *Alp*). During the summer months, the animals – mostly cattle and some goats and sheep – stay with their herder in the mountains. The animals are housed in a shed and are let out during the day for grazing. Their milk is mostly

Key messages

- Pastoralists are a tiny minority in Germany: The ca. 2,800 herders make up 1% or less of the country's farmers.
- They manage up to 70% of the sheep (1.2 million animals), less than 0.5% of the cattle (55,000 animals), and some goats.
- They manage ca. 4.2% of Germany's permanent grassland.
- The 1,000 largest shepherds generate a net value of around €93 million in the form of meat, milk, cheese, wool and dung.
- Pastoralists play an outsized role in maintaining landscapes and the ecology. Their environmental services are worth €260–435 million per year. In addition, grazed landscapes attract tourists and offer habitats for pollinating insects.
- Three categories of pastoralists exist: transhumant shepherds, location-bound shepherds, and alpine farmers.
- There is no generally accepted definition of pastoralists.
- Germany has a wealth of statistics, but specific data on pastoralists are hard to find.



North and east: plains and hills

Location-bound herding (*Standortgebundene Hüttehaltung*)
Grazing in large radius around homestead, dykes
Sheep + some goats

South of River Main: hills and valleys

Migratory sheep keeping (*Wanderschafhaltung*)
Seasonal transhumance (200 km +)
Sheep + some goats

Alps: mountains

Mountain farming (*Almwirtschaft*)
Summer: grazing in mountains. Winter: in valleys
Mostly cattle, some sheep and goats

processed into cheese on site. In autumn, the animals are brought down to the lowlands where they graze until the next spring; if there is snow they are kept indoors. Driving the animals up and down the mountains is a special event that attracts many tourists.

All in all, Germany's pastoralists are a tiny minority, making up only 1% or less of the country's farmers, and less than 0.01% of the population. How many exactly is difficult to judge, as the lines between the different systems and types of pastoralists are fluid and Germany-wide statistics do not cover extensive management systems. We estimate that about 1,000–1,900 of the 20,000 sheep holdings in Germany practise mobile herding, keeping between 52% and 70% of the country's 1.8 million sheep. About 1,000 of these shepherds keep more than 500 sheep each and are likely to work as shepherds full-time (figures from 2016). Only a small and declining number are still transhumant – perhaps 100–200 shepherds.

In 2001, there were about 900 alpine farmers, and their numbers are reported to have since remained fairly stable. In summer 2018, around 55,000 cattle, 4,500 sheep and goats and 800 horses were driven up into the mountains in Bavaria – slightly more than in 2001. The number of alpine pastures had remained stable since 2001, when 1,384 such pastures, including some 40,329 ha of *Lichtweiden* (open, i.e., not forest, pastures), were maintained with livestock.

Pastoralists mostly keep landraces or local breeds. They also use some economic breeds such as the black-headed meat sheep found in northern areas, and the Merino, the main breed in the south. The harsher the terrain, the hardier and well-adapted the breeds have to be. Examples of sheep are the Coburger Fuchsschaf, Rhön sheep, Heidschnucke and mountain sheep. Local goat breeds include the Thüringer Waldziege. Among the cattle, the dual-purpose Fleckvieh breed dominates. Alpine pastoralists also keep Braunvieh and a number of endangered breeds.

Socioeconomic and ecological contributions

As pastoralists are so few in number, their products contribute little to Germany's gross national product. But their contribution to maintaining the environment is disproportionately large. We have the best data for the 1,000 or so full-time shepherds, who manage about 160,000 ha, or 3.4% of Germany's 4,715,000 ha permanent grassland. Also including the 40,329 ha maintained by alpine

pastoralists makes a total of 4.2% of Germany's grassland managed by pastoralists. The bulk of this land is leased or state-owned land.

The products of the shepherds are meat, wool, some milk, and dung. Only the meat appears in government statistics. In 2017, the 1,000 full-time shepherds produced about 16,960 tonnes of

sheep meat worth €82 million; this was 0.2% of Germany's total meat production and 0.3% of the total meat production value. We could not find data on the production of milk and dairy products by pastoralists.

The wool produced by the 1,000 full-time shepherds is worth about €1.9 million; the sheep dung amounts to about €9.2 million (keeping in mind that in Germany, dung is regarded as a waste product rather than as a fertilizer). Both figures are our own estimates, based on the data from several sources.

Through their extensive mobile grazing, pastoralists help restore, maintain and enrich landscapes and biodiversity – a crucial service in view of the high insect losses Germany is currently experiencing. Indirect outcomes include maintaining attractive landscapes for tourism, erosion and flood control, the prevention of avalanches in mountainous regions, and furthering the fertilization of fruit and crops through preserving the habitats of their pollinators. Grazed grassland is an especially good water filter and acts as a carbon sink.

Unfortunately it is very difficult to capture the value of the environmental services of pastoralists. In 2014, the Federal Agency for Nature Conservation estimated that the net value of maintaining a hectare of grassland with high natural value compared to ploughing it up ranges from €1,291 to €2,171, depending on location, characteristics and management (not counting the value created through pollination, tourist attractiveness and related jobs). Applying the figures to the 200,329 ha of permanent grassland maintained by the 1,000 full-time shepherds and some 900 alpine herders, this implies a sum of between €260 and €435 million. This would mean that the value of pastoralists' environmental services is substantially higher than what they earn through product sales and subsidies. Another benefit of the livestock keeping of pastoralists is the conservation of locally adapted livestock breeds.

Definition and historical context

No Germany-wide recognized definition exists of the different types of pastoralists or the terms "herders", "extensive grazers", "*Wanderschäfer*" or "alpine herder". Some of Germany's 16 federal states have definitions to use as a basis for paying out pensions and determining insurance fees. Shepherds themselves see "mobility" and "grazing on foreign land" as key characteristics of a "*Wanderschäfer*". They commonly use this term



Photo: Günther Czerkus



Photo: Petra Elsen



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to refer to both transhumant and location-bound mobile shepherds.

Scientists may regard only transhumant shepherds in southern Germany as true *Wanderschäfer*. This is in fact a rather recent form of pastoralism, having its roots in 1785, when a duke in the southern state of Baden-Württemberg was allowed to bring 40 Merino sheep from Spain to Germany. Before

that, village-based herding prevailed: every village had a goat herd, a pigherd, a gooseherd, a shepherd. This was likely so in most of Germany, but we were unable to find information on pastoral developments in the other parts of Germany.

Data sources

This lack of definition, together with their small numbers, are among the reasons that pastoralists are not included as a separate category in Germany's numerous statistical data, official databases and reports about livestock and farm enterprises (see Table). To estimate their number and contribution, we had to match the statistical data available with the information from government research centres, state-level sheep reports, scientific studies, books by shepherds, books and journals about sheep keeping, and information from non-government organizations and the pastoralists themselves. This was even more difficult and cumber-



Photo: Monica Weispfennig

some because the various databases are based on different collection systems. As a result their data do not necessarily match. The HIT database managed by the German government documents all livestock individually and traces their movements; the state-level *Tierseuchenkassen* record livestock numbers on certain dates, and the statistical offices capture only those farms with more than 10 cattle or 20 sheep. Furthermore, links and data exchange between the various offices are often unclear or lacking.

How to improve the data situation?

Studies are needed on different aspects of pastoralism in Germany other than the Swabian–Franconian transhumance. The “sheep reports” should expand their regional coverage, include also holdings with under 400 sheep, and put more emphasis on the environmental contributions of mobile shepherds. Furthermore, more data are required on the impact of mobile grazing on biodiversity. Other topics that could help improve the understanding of the ecological contribution of pasto-

ralists include a comparison of the water-filtration capacity of land maintained by mobile livestock and land under intensive management; the quality and purification costs of the water produced under these management approaches; and the flood damage to grazed and non-grazed dyke sections and the land protected by dykes. To enable this, stakeholders should establish or identify a body responsible for initiating and coordinating the research on pastoralism and sharing the information.

Vision for the future

The Covid-19 pandemic has boosted direct marketing: sales in farm shops have risen. Products selling well include ground lamb meat and lamb parts. To maintain and enhance Germany's local capacities, the government should drastically enhance support to the local production, processing and marketing by pastoralists and smallholders.











Concern about the environment and animal welfare is high and rising. This offers opportunities for pastoralists to produce and market their products.

Nevertheless, pastoralism is often not economically viable. Increasing numbers of herders are giving up

the profession, and finding successors is difficult. Government support is needed to ensure that this form of livestock production is not lost.

Pastoralists are vital for maintaining landscapes that are important for biodiversity and tourism, and for tending dykes that prevent floods. They manage a disproportionate amount of Germany's most valuable landscapes and earn a sizeable proportion of their income by doing so. But the payments they receive do not reflect the true value of their environmental and other indirect services. The payments compensate for costs and losses rather than adding to herders' income as the pro-

Data sources on German pastoralists

Institution	Parameters	Area covered	Years covered, frequency	Accessibility
Federal Statistics Office (Destatis)	Agricultural and livestock data	 National	Some data regularly, some annual	Genesis database and annual year books, online accessible. www-genesis.destatis.de/genesis/online
Federal Statistics Office (Destatis): Farm structure surveys	Holdings with more than 5 ha, more than 10 cattle or 20 sheep or goats	 National, sample of ca. 80,000 farms	2016, every 4 years	BLE (2019)
HI-Tier Database	All ruminants, pigs and equids and their movements	 National	Continuous	Data accessible for food security and veterinary controllers, other uses unclear. www.hi-tier.de
Eurostat (gets its data from EU members states)	Numbers of livestock and production	 EU member countries	Annual	ec.europa.eu/eurostat/de/data/data-base
Federal Office of Consumer Protection and Food Safety	Enterprises that process and trade livestock products	 National	Regular updates?	apps2.bvl.bund.de/bltu/app/process/bvl-btl_p_veroeffentlichung?execution=e1s3
Livestock insurance funds 'Tierseuchenkassen'	Numbers of the most important livestock species at a specific date	 State	Annual	Form the basis of compensation payments and disease control, not publicly accessible
14 State-level statistical offices	Varies between states	 State	Unclear	Unclear
Ministry of Rural Areas and Consumer Protection, Baden-Württemberg	Economic analysis, sheep enterprises with ≥ 400 ewes, participation costs ca. €250	 State, Baden-Württemberg and Bavaria	Every 3–4 years	"Sheep reports", summaries may be online, full reports against fee. lel.landwirtschaft-bw.de/pb/Lde/Startseite/Unsere+Themen/Schafreport
State-level ministries of participating states	Economic analysis of book-keeping results	 Participating States (sample of 63 holdings in 8 states in 2016/17)	Annual	LfJULG (2018)
Various authors and institutions	Aspects of pastoralism and environment	 Depends on individual study		Published studies, reports and other grey literature, partially online



National level



Sub-national level



Individual study

duction output of species-rich grassland is lower than that of arable land. Pastoralists' contributions must be recognized and be rewarded adequately.

Despite the wealth of data in Germany, it is still difficult to obtain data on pastoralism. Reliable information is vital for appropriate policymaking on livestock and the environment.

Key references

- BfN.** 2014. Grünland-Report: Alles im grünen Bereich? Bundesamt für Naturschutz. www.bfn.de/fileadmin/BfN/service/Dokumente/positionspapiere/PK_Gruenlandpapier_30.06.2014_final_layout_barrierefrei.pdf
- BLE (Bundesanstalt für Landwirtschaft und Ernährung).** 2019. Statistisches Jahrbuch über Ernährung, Landwirtschaft und Forsten 2018. Bundesministerium für Ernährung und Landwirtschaft. www.bmel-statistik.de/archiv/statistisches-jahrbuch/
- Cliffhard, H., and M. Reinhardt.** 2013. Wanderschäfererei. Eugen Ulmer, Stuttgart.
- Deutscher Bundestag.** 2019. Bedeutung der Wanderschäfererei für die Biodiversität in Deutschland. Antwort der Bundesregierung auf eine Anfrage der Grünen. Drucksache 19/12778. dipbt.bundestag.de/dip21/btd/19/127/1912778.pdf
- Deutscher Grünlandverband.** 2010. Erhaltung des Dauergrünlands und Klimaschutz. In: Schaf- und Ziegenhaltung: Dienstleister für die Gesellschaft. Deutscher Grünlandtag, 16–17/10/2010. Deutscher Grünlandverband, Berlin. Pp. 39–47.
- LfULG.** 2018. Buchführungsergebnisse spezialisierter Schafbetriebe in ausgewählten Bundesländern, WJ 2016/2017. Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie. publikationen.sachsen.de/dbd/artikel/32660/documents/49852
- Luick, R.** 2004. Transhumance in Germany. Pp. 137–54 in: R.G.H. Bunce et al. (eds.). Transhumance and biodiversity in European mountains. Report of the EU-FP5 project TRANSHUMOUNT (EVK2-CT-2002-80017). IALE publication series No 1.
- StMELF.** 2018. Despite drought: Good mountain summer comes to an end. Press release. Bayerisches Staatsministerium für Ernährung, Landwirtschaft und Forsten. www.stmelf.bayern.de/service/presse/pm/2018/199054/index.php
- Ringler, A.** 2010. Alm- und Alpwirtschaft in Bayern. Bayerisches Staatsministerium für Ernährung, Landwirtschaft und Forsten. www.stmelf.bayern.de/landwirtschaft/berglandwirtschaft/001049/index.php
- Wessely, H., and A. Güthler.** 2004. Alpenpolitik in Deutschland: Anspruch und Realität. Bund Naturschutz Forschung, Nürnberg, p. 25. web.archive.org/web/20140225174737/http://www.bund-naturschutz.de/fileadmin/download/alpen/BN-Alpenstudie.pdf

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