

Herders' Manual

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Herders' Manual

Edited by Inam-ur-Rahim and Daniel Maselli. Bishkek, Kyrgyzstan: University of Central Asia, 2011. 124 pp. Available in Kyrgyz, Russian, and English. Free download at <http://msrc.ucentralasia.org/events.asp?Nid=248>. ISBN 978-9967-448-36-0 (Kyrgyz); ISBN 978-9967-448-39-1 (Russian); ISBN 978-9967-26-502-8 (English).

The Herders' Manual is an effort to take on the important task of tackling a little documented subject area and to provide comprehensive, practical advice to herders in the Kyrgyz Republic on pastoral issues, which range from vegetation to pasture management to animal health issues. The manual is a joint project of the University of Central Asia's Mountain Societies Research Centre and the Swiss National Centre of Competence in Research North-South in the Kyrgyz Republic. A similar manual was created for the Western Pamir region of Tajikistan.

The importance of taking on these issues is evident. The Kyrgyz Republic is undergoing profound reforms in pasture management, with many decisions that involve a change of practices being taken by pasture users directly. There clearly is a need to reform practices installed in the Soviet era, but all stakeholders are still in the process of gradually understanding what mix of traditional knowledge and more modern approaches will be optimal in the country context. Changes in pasture management have been slow, with the State retaining ownership but lacking the means for, and often also interest in, effective management. Furthermore, 70 years of Soviet management has meant that herders lost their ancestral knowledge about how to manage livestock and pasture usage. At the same time, the role of herding in Kyrgyz economy, society, and culture has been enormous, with nearly half the country's area being

used as rangeland and with a whole way of life of the traditionally nomadic and seminomadic Kyrgyz tribes based on migration in search of good pastures.

This manual marks a strong effort to take on topical issues. It covers much ground, and much of the information is useful and well presented. The manual sets out basic principles of appropriate grazing, explaining, in simple ways, the relations between grazing and plant regeneration. The information provided on pasture improvement is valuable, given that some Kyrgyz herders have never been exposed to the knowledge and practices included in the manual. Livestock management is another topic covered by the manual, which presents principal methods of animal care. In general, the manual touches on many if not all of the topics most important to Kyrgyz herders.

However, there are 3 important shortcomings that detract from the overall valuable information provided. First, the manual does not fully meet its goal of combining traditional approaches with scientific information. In fact, little reference is made to traditional methods, and the applicability of traditional practices in different areas is hardly discussed. This is particularly the case in the second section of the manual on pasture management. Second, it remains unclear to which audience the manual is addressed. Although ostensibly targeting herders and local pasture committee members, the text is overly scientific and pitched at a more academic level than what would be practically applied by individual herders. Third, in its attempt to cover all knowledge related to livestock farming, the manual seems to have lost some of its focus and in some parts does not provide needed details.

The manual is composed of 4 parts, with the last one including annex materials. Part A presents photos and concise information about the most important and de-

sired pasture plants and least desirable but widely seen weeds or toxic plants. The information is rich in visual material that can help herders to identify the plants in the field. There is, however, little cross-referencing of this information to other parts of the manual.

The manual uses a classification of plants that was established jointly with herders. The plants were identified and assessed with respect to their desirability to different livestock, their habitat, and their tolerance to different climates as well as anthropogenic pressures. Yet, presumably, herders would have benefited from additional practical guidance on how to apply this information. For instance, does poor grazing tolerance mean that animals should not eat a plant? How can farmers use the information on weather tolerance? Furthermore, in identifying poisonous plants and weeds, it would have been beneficial to provide information about the consequences of their ingestion, including the symptoms that animals show when poisoned by the various plants.

Part B is about pasture management. This is where traditional knowledge is especially crucial to ensure preservation and regeneration of biodiversity and ecosystems in general. The manual offers sound theoretical information about an appropriate rotational grazing scheme. However, although guidance, such as "Do not allow animals to stay too long on autumn pastures," (p 71) is correct, it appears to be too general.

Part B contains accurate information about biomass calculation and the regulation of pasture usage, but this information is of limited applicability by herders. Pasture assessment is based exclusively on vegetation and biomass, and only fodder plants are used as indicators. There are, however, other indicators that are likely far more important for ecosystem monitoring, including those that assess soil compaction, litter, incidence of cattle tracks, wind

erosion, and increased rates of water loss. These indicators are embedded in traditional knowledge and hence easier for herders to apply; yet, they are not referenced in the manual.

Part C concerns livestock management. This part provides accurate and useful information but, in some parts, would have benefitted from more detailed explanations. For instance, the manual states that “Proper stacking of hay also prevents spoilage and allows for a longer period of storage” (p 96); however, it does not explain what proper stacking means. The authors also suggest that farmers should rely solely on fodder. This disregards the fact that many experienced Kyrgyz livestock farmers graze their animals on natural high pastures all year round, as in the old times.

Part C ends with a table of the most widespread animal diseases in

the region. This information is crucial for herders in the Kyrgyz Republic today, because there is a lack of professional veterinarians in remote areas, and new animal diseases appear every year. Guidance on treatment, however, is limited to use of antibiotics and other pharmaceutical drugs, whereas traditional treatment methods and preventive measures used by Kyrgyz livestock farmers, including use of minerals, herbs, plants, and other natural elements, are not included.

In summary, the manual represents a courageous and important first step to provide practical guidance to herders on livestock and pasture management issues. This is no easy topic, because these issues are integral to Kyrgyz life and yet subject to many changes. The manual's strength is in its provision of

relevant technical and scientific knowledge in a concise manner (although it must be noted that clearer, more detailed, and more comprehensive referencing would have enhanced the book). Yet, although at times it succeeds in making this information fairly accessible, in other parts of the manual, the style seems overly technical and somewhat removed from how a Kyrgyz herder would apply the knowledge.

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