

Science and Culturally Constructed Knowledge. – *Public Understanding of Science* 1 (3). London: The National Museum of Science and Industry.

1993. Kautokeino '1960': Pastoral Praxis. – In: Erling Berge (ed.). *Common Property Regimes: Law and Management of Non-Private Resources*. Ås: Agricultural University of Norway.

1993. Social Construction of the 'Tragedy of the Commons' and Saami reindeer pastoralism. – *Acta Borealia* 1992 (2)

1994. *Herds of the Tundra: A Portrait of Reindeer Pastoralism*. Smithsonian Institution Press, Washington and London. 242 pp.

1994. Property Deeds and Divisions, Auctions and Mortgages: Revsbotn Fjord, 1957–1958. – In: Nils Jernsletten & Dikka

Storm (eds.). *Festskrift to Ørnulf Vorren*. Tromsø: Universitetsforlaget.

1996. Saami Reindeer Pastoralism and the Norwegian State, 1960s – 1990s. – *Nomadic Peoples* 38.

1998. Kautokeino 1960: Pastoral Praxis. – In: Erling Berge (ed.). *Law and the Governance of Renewable Resources*. Oakland: International Center for Self-Governance.

In prep. 'Reintyveri' – Who says? Notes on a culture put at odds with itself.

In prep. *The Politics of Reindeer Wealth*.

(The selected bibliography which represents about a fourth of Paine's total production includes works on Saami reindeer husbandry and Saami society).

Robert Paine's most important contribution to the study of reindeer husbandry (pastoralism) is his monograph «*Herds of the Tundra*» of which Dag Elgvin gives this report:

Saami Reindeer Husbandry 1960 - 1990

Robert Paine has followed the Saami reindeer-herding society in northern Norway for more than 40 years. His extensive knowledge is concentrated in "*Herds of the Tundra*" where he discusses the relationship between a pastoral group and the government authorities. The first part of the book describes the "traditional" pastoral society, the second part analyses the Norwegian government's policy from 1975. In the post-war period, crucial events for the pastoral Saami occurred both technologically, economically and legally; the snowmobile was introduced (about 1965), the government started giving economic subsidies (from 1975), and the Norwegian Parliament passed a new Act on reindeer husbandry (1978).

Period 1961–62

Paine follows a family through a full cycle of their seasonal and semi-nomadic life and compares and contrasts this with reindeer management practices in other regions of Finnmark. He explains the balance and dependence of herd size to grazing area and size of family and introduces us to the decisions of herd management. In West Finnmark reindeer region most siidas (group of herders) tried to maximise herd size. Increased size symbolised cleverness and secured the future. In other siidas owners decided to slaughter as many animals as was possible to increase their cash income without reducing the stock. At the same time there were still cultural checks on land use. Neighbouring siidas would intervene if herders let their animals stray into others' territories. Inside the reindeer herding societies Paine found strong competition to build up the largest herds, breed the best draft reindeer, or achieve the largest income. Success depended on ability, talent and hard work.

Period 1975–89

The snowmobile made it possible to control larger herds and in fact many Saami increased their herd size. Snowmobiles, however, also demanded a larger income and this could only come from increased meat production and sales from the herds. The statistics do not show any significant increase in number of reindeer until the 1970s when the government began to subsidise the reindeer husbandry. The purpose was to encourage owners to increase production and sales, giving possibilities of raising their material living stan-

ard. Having the largest possible herd was however a deeper Saami value. With more cash, the need to slaughter animals was reduced. Despite their intent, the subsidies resulted in substantial increase in the number of animals and thus aggravated competition for available grazing areas.

At the end of the last century the winter pastures had been defined as "common pastures" by the Norwegian government. Consequently, some reindeer owners with large herds, referred to this rule of "common pastures" as legitimising their use of the lands belonging traditionally to others. The direct result was that Saami owning large herds, in particular, were able to force away others with smaller herds.

Paine sees tragedy in this competition for available range, not just a biological tragedy (as the pastures deteriorated), but also a social one. The increasing government involvement in the management of reindeer husbandry reduced the interdependency of the herders. There was a shift of focus from their own pastoral knowledge to that of the Norwegian economical system. The 'centre' of life was moved away from themselves, to the modern society. The Norwegian government and the Saami reindeer herders had different goals. The latter was originally concerned with a cultural way of life and the reindeer herd; the government was interested in economic development. Later this difference in focus could also more or less be seen in how the Saami reindeer owners were organised. Originally there was just one organisation. Norske Reindriftingsamers Landsforbund, (NRL) have the right to negotiate reindeer husbandry agreements with the Norwegian government. In the 1980s a new organisation with the Saami name Boazu Eallahus Searvi, (BES) was founded. BES emphasised the significance of more «traditional Saami pastoralism».

Who shall then decide in reindeer management? Paine suggests the Saami Parliament but many pastoralists disagree since the reindeer owners constitute a minority in the assembly. Regardless, Paine feels it essential that any decision making process must involve reindeer herders. He believes reindeer herders then will be able to limit herd sizes to what the pasture can carry.

Robert Paine offers a book that is worthwhile for several reasons, among them he gives a detailed description of a pastoral life that once existed and of its clash with a modern welfare society. He also describes the contrasting values in these societies and further discusses the practices that may help Saami reindeer owners to find a sustainable future.

Dag T. Elgvin

You can now purchase «**Herds of the tundra**»
at much reduced price. The offer is time limited:

Smithsonian Institution Press will until November 16, 1998, offer a purchase at 75% off the list price of \$59, plus shipping and handling, for hardcover edition of «Herds of the tundra». Credit card transactions (MasterCard, Visa, American Express, Discover) are preferable.

Place your order in fax no. ++ 202-287-3184 to Smithsonian, 470 L'Enfant Plaza, Suite 7100, Washington, DC 20560, U.S.A and refer to their letter to Robert Paine of October 7, 1998.