

Political Reform, Professional Knowledge and Moral Appeals: Tschärner's Strategy for Sustainability

Martin Stuber

Summary

In 1768 Niklaus Emanuel Tschärner (1699–1777) published an educational article in the *Abhandlungen und Beobachtungen* ("Essays and Observations") of the Oekonomische Gesellschaft Bern (Economic Society of Bern) about more economically sound forest management. In it he sketched a comprehensive strategy for achieving sustainability, including political proposals for professionalizing forestry and scientific instructions for how to increase timber production, as well as moral appeals for decreasing energy consumption. Tschärner is a typical representative of the "age of wood" (*Hölzernes Zeitalter*), a period defined by the omnipresence of lumber availability in public discourse and the belief that there is a shortage of wood, with the result that there are systematic attempts to improve the management of this resource. This trans-European diagnosis of an energy crisis was connected with the interests of the forest administration and with new perspectives for economic growth.

A stranger viewing our land from above and seeing nothing but mountains and hills covered with forests would scarcely be able to believe that there is a shortage of wood here. But if the stranger were to descend into the woods, he would immediately recognize the contradiction between the way wood is wasted on the one hand, while at the same time forest management is neglected. — Niklaus Emanuel Tschärner, *Abhandlungen und Beobachtungen* ("Essays and Observations"), 1768

Niklaus Emanuel Tschärner (1699–1777) opened his article with an effective rhetorical strategy, using the perspective of a stranger to diagnose the situation in the Bern forests.



Niklaus Emanuel Tschärner, founding member, secretary, and later president of the Oekonomische Gesellschaft Bern on his estate “Blumenhof” talking with a peasant.

Watercolor by J. J. Aberli, 1775

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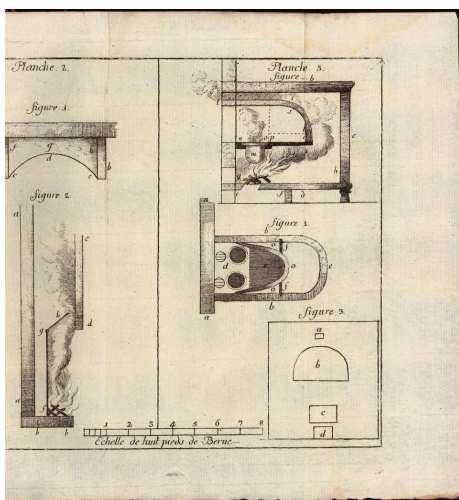
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His diagnosis was based on international forestry literature as well as on extensive practical experience. In 1752 he took on the management of the estate Blumenhof in Kehrsatz, which included 50 acres of forest. In 1764 Tschärner was elected as a member of the official forestry department (Holzkammer) and served as an inspector in the Königsberg Forest. When the forestry department commissioned wood shipments along the Aare River from the uplands to Bern, Tschärner negotiated prices with the contractor. Finally, he was deeply involved with the forest management in the district of Schenkenberg, which he presided over as bailiff starting in 1767.

First, Tschärner proposed political reform of the forest management. He complained that the peasants in his district of Schenkenberg had no scruples about breaking forest use regulations. Therefore it was necessary to pay forest rangers (Bannwarte) well, since otherwise only the poorest people in the village would willingly take on the job, often themselves participating in law-breaking. At higher levels of the forestry administration, he called for better professional qualifications. A forester should be well-informed about the various kinds of forests and trees in his precinct. He and his assistants (Unterförster) should be able to describe exactly how many trees had been planted and harvested. This goal of equilibrium was implicitly based on the principle of sustainability. This principle also guided Tschärner’s explicit call to think of the future as well as the present.

In addition, Tschärner's plan included directions for how foresters could increase production. None of the standard German texts on the topic offered any instructions suitable for the rural Bern population, he maintained. All were either too elaborate or too academic or not applicable to the situation in Bern. Therefore Tschärner included in his article a forestry calendar which clearly and concisely presented the various forestry activities, broken down month-by-month.

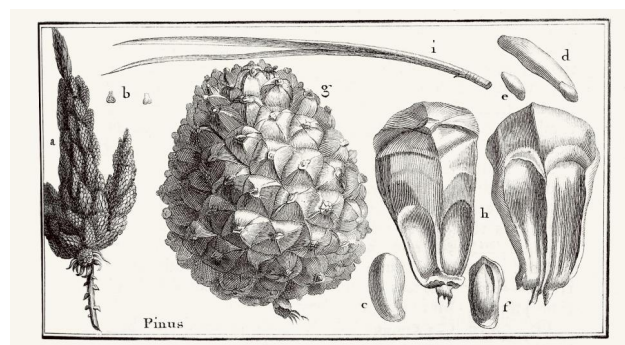
Finally, Tschärner addressed wood consumption. There was a high degree of waste resulting from the surplus of wood available in the past, which led previous generations to develop an ever-increasing inclination for luxury and comfort. In order to counter this, Tschärner called for more thriftiness. The *Oekonomische Gesellschaft Bern* had created a whole set of methods to encourage this: they called for the use of more efficient stoves in living rooms instead of the open fireplaces which had become popular. Bricks were to be used instead of wooden shingles, hedges instead of wooden fences, and coal instead of firewood.



Sketch of a combined kitchen and sitting-room oven used to save energy

Source: *Abhandlungen und Beobachtungen der Oekonomischen Gesellschaft Bern* 1768, 1. Stück.

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Pine tree by Henri-Louis Duhamel du Monceau (1755). Duhamel du Monceau's work was an important basis for Tschärner's ideas.

Source: Duhamel du Monceau, Henri-Louis. *Traité des arbres et arbustes*, Paris, 1755, p. 121.

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How much the comprehensive renewal programs actually changed the Bern forests is a question that remains to be researched. On the one hand, the modernizers of the forest were able to guide wood supply and delivery in their roles as bailiffs and members of the forestry department. The influence of the Economic Society was evident in the Bern forest law of 1786. On the other hand, at the administrative level it was not possible to implement the key elements of the modernization program. The additional forester positions never materialized, nor was there any binding agreement to raise the pay of the forest rangers.

Further readings:

- Radkau, Joachim. "Das 'hölzerne Zeitalter' und der deutsche Sonderweg in der Forsttechnik." In *Nützliche Künste: Kultur- und Sozialgeschichte der Technik im 18. Jahrhundert*, edited by Ulrich Troitzsch, 97–117. Münster: Waxmann, 1999.
- Stuber, Martin. *Wälder für Generationen: Konzeptionen der Nachhaltigkeit im Kanton Bern (1750–1880)*. Cologne: Böhlau Verlag, 2008.
- Stuber, Martin. "Niklaus Emanuel Tscharners 'Anweisung zu der besten Oekonomie der Wälder.'" In *Kartoffeln, Klee und kluge Köpfe: Die Oekonomische und Gemeinnützige Gesellschaft des Kantons Bern OGG (1759–2009)*. Edited by Martin Stuber, Peter Moser, Gerrendina Gerber-Visser, and Christian Pfister, 99–104. Bern: Haupt Verlag, 2009.
- Tscharner, Niklaus Emanuel. "[Anweisung für das Landvolk zu der besten Oekonomie der Wälder](#)", in: *Abhandlungen und Beobachtungen durch die oekonomische Gesellschaft. Bern, 1768. (2. Stück): 1–63.*
- Wälchli, Karl. *Niklaus Emanuel Tscharner: Ein Berner Magistrat und ökonomischer Patriot 1727–1794*. Bern: Stämpfli & Cie, 1964.

Related links:

- Research project "Useful science, nature appropriation and politics. The Economic Society of Bern in the European context"
<http://oeg.hist.unibe.ch>
- The journal of the Economic Society of Bern (available online)
<http://www.digibern.ch>

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- <https://www.environmentandsociety.org/arcadia/foundation-oekonomische-gesellschaft-bern>

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- http://commons.wikimedia.org/wiki/File:Aberli_NETscharner.jpg

About the author:**Martin Stuber**

Martin Stuber has published widely on the history of forestry, network-based scholarly communication, and the production of useful knowledge in the eighteenth and nineteenth century; in particular, he has explored Albrecht von Haller and the Economic Society of Bern (Oekonomische Gesellschaft).