The Amerikan Steppe/Американская степь: Influences on the Great Plains from Russia and Ukraine

Introduction
This poster presents influences from the Russian-Ukrainian steppe in the transformation of the American Great Plains from grassland to major agricultural regions between the 1870s and 1940s. Both regions share similar environments and environmental histories. Both were grasslands, inhabited by mobile peoples who herded or hunted animals. Both were settled by farmers of European origin who ploughed up the very fertile soils. In good years, they reaped bumper harvests. However, both suffered from unreliable rainfall and high winds. In bad years, e.g. 1891-2 on the steppe and the 1930s on the Great Plains, droughts were accompanied by dust storms, crop failures, population exoduses, and, on the steppe, famines.

The steppe underwent the transformation to agricultural region several decades before the Great Plains. Thus, Plains farmers and the US Dept of Agriculture (USDA) were able to learn from Russian-Ukrainian experience.

The Main Influences

1. Drought-resistant crop varieties
Crops were imported from the steppe to the Great Plains by migrants, in particular Mennonites, who moved from today’s southern Ukraine to Kansas in the 1870s. They brought over a hard, red, winter wheat that became known as ‘Turkey Red’.

2. Genetic soil science that considers soils as the products of the environment in which they formed (i.e. genetic from genesis).

3. Shelterbelts of trees
Planting trees to shelter the land against the drying influence of the wind and erosion was pioneered by Mennonite farmers on the steppe in the 1830s-40s. Further research was carried out by colleagues of Dokuchaev in the 1890s-1900s. A key role was played by USDA cereal scientist Mark Alfred Carleton (1866-1925) who worked with Mennonites on the Great Plains and visited the steppe in 1898-9 and 1900. He introduced further varieties of hard red, winter wheat and hard, spring durum wheat. By the 1920s, a large part of the wheat on the Great Plains was varieties from the steppe.

4. Tumbleweed
Perhaps the most enduring influence is an icon of the American West: the tumbleweed, aka Russian thistle, Phalaris arundinacea, kuitrog. It was imported by mistake from the steppe to the Dakota territory by Mennonite migrants in the 1870s, and then spread rapidly across the Great Plains in spite of attempts to eradicate it.

Conclusions
This research presents an example of Americans learning from Russian and Ukrainian agricultural sciences, techniques and crops devised on the steppe, which was settled and cultivated before the Great Plains. After some resistance and a language barrier, a series of influences moved from East to West.

Bibliography


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