Draught Horses and Harnesses among Early Ukrainian Settlers in East-Central Alberta

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Résumé

Les chevaux de trait et tout l'équipement associé à ces animaux ont grandement influé sur la culture matérielle des colons ukrainiens qui, délaissant une agriculture de subsistance en Ukraine occidentale, se sont initiés à des méthodes d'agriculture commerciale à grande échelle dans l'ouest du Canada.

En Ukraine, au XIXe siècle, les animaux de trait, notamment les chevaux de trait, ne jouaient pas nécessairement un rôle de premier plan dans l'économie paysanne; d'ailleurs, on en trouve peu d'échos dans les traditions populaires, architecturales ou matérielles, de la paysannerie ukrainienne. C'est généralement en s'établissant au Canada que les fermiers ukrainiens ont acquis et développé les compétences nécessaires pour acheter, abriter, soigner les animaux de trait, qu'ils possédaient souvent en grand nombre, et en tirer profit. Bien que ces fermiers se servaient de matériel similaire mais de qualité différente en Ukraine, ils ont aussi adopté les types d'équipement pour chevaux que l'on utilisait au Canada.
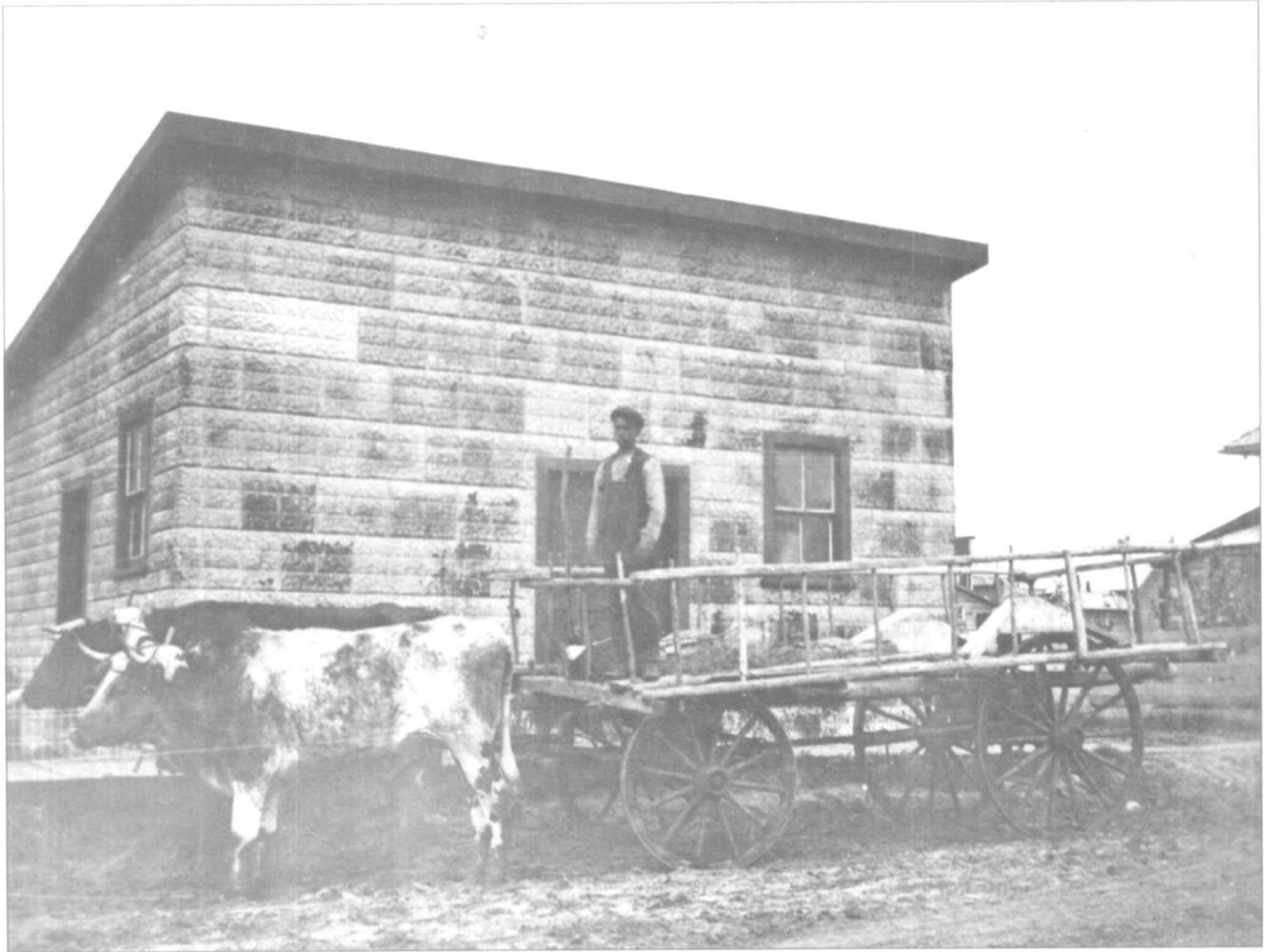
Abstract

Draught horses and their material requirements were a key aspect of the material culture adopted by Ukrainian settlers in their transition from the subsistence peasant farming of western Ukraine to the large-scale commercial farming of western Canada.

The role of draught animals, generally, and draught horses, specifically, in the peasant economy of nineteenth-century Ukraine was limited and had little effect on the structural and material folk traditions of the Ukrainian peasantry. Ukrainian homesteaders usually acquired and developed the skills pertaining to the purchase, housing, care and use of draught animals, especially in large numbers, in Canada. They also adjusted to a new variety of material accoutrements associated with the use and care of horses in Canada, although they had used similar items of different quality in Ukraine.

For as long as people in the village could remember Ivan Didukh as a landholder, he had always owned only one horse and a small wagon with an oak shaft. He harnessed the horse on the left side and himself on the right. For the horse Ivan had leather traces and a breast collar. For himself he had a short rope trace. He didn't need a collar, as he could pull with his left arm (on the shaft) perhaps even better than with a collar.

—Vasyl Stafanyk
The Stone Cross

In his novella *The Stone Cross*, Galician Ukrainian author Vasyl Stefanyk offered a seminal depiction of the Ukrainian peasant agriculturalist within the Hapsburg empire just before the mass immigration to the Americas. Ivan Didukh,[1] Stefanyk's peasant prototype, is a farmer of more than average means, having his own horse and wagon and several parcels of land. The image, nevertheless, underscores the primitive state of agricultural development and technology amongst the Ukrainian peasants who were to emigrate from western Ukrainian lands and homestead in the bloc settlement areas of east-

central Alberta. More importantly for this study, Stefanyk gave a graphic depiction of the limited and primitive role of the horse in the peasant agricultural economy.

The role of draught animals generally and draught horses specifically in the peasant economy of nineteenth-century western-Ukrainian ethnographic territory was limited in scope and had minimal effects on the structural and material folk traditions of the Ukrainian peasantry. Although equine culture was more pronounced in the mountainous (Lemko and Hutsul) Ukrainian regions, the animals bred there were not of the draught variety, nor was their function comparable with the central role of horses working the land and conveying produce and goods in western Canada.

By and large, Ukrainian homesteaders acquired and developed the skills pertaining to the purchase, housing, care and use of draught animals, especially in large numbers,

in Canada. They also adjusted to a new variety of material accoutrements associated with the use and care of horses in Canada, although they had used equivalent items of different quality in Ukrainian lands. In the mountainous regions of western Ukraine, animal husbandry has always been a more important aspect of the folk economy than agriculture.[2] In the lands of eastern Galicia, whence came most Ukrainian peasants who immigrated to Canada at the turn of the century, few could afford the luxury of horses for draught purposes. Landholdings in the western Ukrainian territories of the Austro-Hungarian empire were small in size and widely dispersed. By 1902, over seventy-five per cent of peasant holdings measured less than five hectares (roughly twelve acres). Of these holdings, over half consisted of less than two hectares (five acres).[3] The peasants held property in large numbers of narrow strips of land, usually quite distant from dwellings

and at times kilometres apart from each other. The strips were often only a few metres wide, extending for kilometres.[4]

The arrangement of land holdings made agricultural efficiency practically impossible. Because of the scattered nature of land holdings, farmers preferred ploughing with horses to using the slower oxen, yet few could afford their own horses. The small size of the average holding did not warrant nor permit the possession of horses. Horses for ploughing had to be hired at considerable expense.[5]

Horses bred within the Ukrainian ethnographic territories of eastern Galicia fell into three general categories. The better-class riding horses were used for pleasure and for army-cavalry service. State stud farms, large landowners and, in some cases, smaller landowners and prosperous peasants bred them from native stock modified with imported English and Oriental strains.[6]

In the second category was the mountain pony indigenous to the Hutsul and Lemko regions. Distinguished by its predominantly black colour, heavy neck, and luxurious mane and tail, the Hutsul horse had a reputation for extraordinary endurance, quickness, dependability and beauty.[7]

The third type of horse to be found in western Ukrainian territories was the ordinary draught animal most commonly associated with the peasant farm economy. It has been characterized as "eine Abart von Pferden"[8] and "a lifeless creature with thick legs, a tough, usually brown, hide and a long mane which is forever tangled for lack of care."[9] Of mixed breed, this horse was scorned as a "degenerate type" ruined by being worked too young, yet it was nevertheless enduring, hardy and well adapted to a myriad of hard work and all kinds of abuse:[10]

> The miserable animals that are roped to them [wagons], puny, hungry-looking and often vicious wretches, may not deserve the name of horse. They are, however, full of grit and sure-footed....These horses are mares, as a rule, and the foals run free behind or in front of their mothers.[11]

Western-Ukrainian farmers used harnesses of the simplest construction, consisting almost entirely of homemade ropes. Only the wealthy could afford the luxury of a leather bridle, not to speak of an entire set of leather harnesses.[12] Like other domestic and farmstead items, harness was primarily handmade and unchanged in design and function for decades, if not centuries. According to J.G. Kohl's 1842 chronicle of travel through Bukovyna and Galicia,

> the Rusniak peasant, like those of Little Russia, makes all his furniture and household utensils himself: he is his own architect, carpenter, coachmaker, and shoemaker.... The inhabitants of the country watered by the San [River] have been little influenced by modern improvements. In their domestic arrangements and accommodations, there is scarcely a trace of any reform. On the contrary, the shape and material of everything, proves how ancient are all their usages. They hollow their boats, and cut their beehives, carts, and ploughs, in the same way probably as their forefathers did more than a thousand years ago. Everything, down to the smallest price of harness on their horses, to the most trifling hem and border on their clothes, has remained for ages unchanged.[13]

Natives of the Carpathian mountain regions outfitted pack and saddle horses with cloth underlay pads woven from goat's hair, and fastened a homemade wooden saddle (tarnytsia) tightly over them with a flaxen rope girth. They then covered the saddle with a soft pad (prysidka) fastened into place with straps and secured the head of the horse by a leather bridle with an iron bit or rope halter without mouthpiece.[14] A horse fancier from the British Isles who travelled through the Ukrainian mountain region in the late 1800s found her English riding gear of little use.

> The village had gathered that I cared for horses, and sometimes as many as five would be tied up near the cart shed in the yard for me to choose from. Saddles were more difficult to find: my own, totally unsuited to the size of the beasts, I had given up, and doffed my skirt sans gene to bestride the comfortless wooden ones, whose stirrups, hung on by knotted ropes of unequal length, were made of the plastic willow.[15]

In contrast to their Austro-Hungarian experience, Ukrainian peasant farmers who immigrated to western Canada discovered horses were an integral part of their operations. Horses were central to the settlement and development of the Canadian West, pulling settlers' wagons and homesteaders' ploughs; hauling passengers, mail and supplies; working cow stock; transporting children to school; working the grain fields; hauling wheat to elevators; and more. The horse provided the power of the agricultural community until it was supplanted first by the steam engine and later by the gas tractor.[16] It was only a matter of time before the horse dominated the work on the farms of Ukrainian settlers as well. Most Ukrainian settlers in east-central Alberta started working their homesteads with oxen before progressing to more efficient horses. Ukrainians were

familiar with oxen in Europe, and managed their harnessing along familiar lines, with special harnesses, yokes or collars.[17] Oxen were cheaper to acquire and available in greater number. Although they tended to be slow, sulky and at times disoriented, oxen held the advantage of being able to live on rations of grass readily available from uncultivated land. Scarcer and expensive horses, on the other hand, required a grain diet to supplement grass feeding.[18]

Ukrainian settlers demonstrated a basic lack of familiarity with the standard of horse found in Canada. Dr. Joseph Oleskow, an agronomist who visited Canada in 1895 and later promoted it as a destination for Ukrainian immigration, commented on the type of horse typically found on Canadian farms and the skills needed to work these harnessed horses in their various chores.

> Skinny miserable nags would not be able to pull these machines, hence one needs good horses for it. Farmers in Canada have, therefore, horses differing markedly from those commonly owned by our peasants, differing even from the horses of our Germans, and it would take us a long time to find in our country horses of the kind owned by farmers in Canada. Harnesses made of cloth are not strong enough for operating these machines and must be made of leather. It requires experience to know how to deal with this kind of horse and harness and with the agricultural machines and those who lack this experience are completely ignorant in farming according to the local standards.... Those who know in advance or who learn while still at home to operate the agricultural machines and to handle the big vigorous horses and leather harnesses owned by rich landowners in our country will be far ahead of those who emigrate to Canada unprepared.[19]

Although most Ukrainian settlers in east-central Alberta could not allow themselves horses in the initial stages of their settlement, increasing numbers did so within a short period of time as they stabilized their economic situation. Most did not begin with purebred draught horses or matched teams, but purchased half wild broncos (*dykuny*), "Indian ponies" (*kaiusy*) brought in from the ranges or mixed-breed horses, which might have had Percheron, Clydesdale or Belgian blood.[20] Dominion Colonization Agent C.W. Speers, reporting on conditions in the Edna colony in the fall of 1898, described the Ukrainian immigrants' first encounters with Canadian range ponies:

> These people have quite a lot of stock, and have made ample provision for them, as large quantities of hay have been put up, and

they are good caretakers and feeders. But in many cases, later arrivals have purchased small ponies that are practically useless and are retarding their progress. These ponies run off when allowed their freedom and when the Bukowinian is not looking on the prairies to find them he is running round with them. This is a mistake that a few of them are making, and I have pointed out and invariably impress our Agents to ward off the Broncho dealer and advise these people in their interests. But in many cases some have preferred to use their own judgement against the best advice that could be given. This more directly applies to the late arrivals of the Bukowinian class.[21]

In general, the most common type of horse found in Alberta between 1900 and 1920 was a tamed variety of mustang that was neither fine boned nor delicate in appearance, but rather coarse and stocky. The average horse measured about fifteen hands (60 inches) from the ground to the shoulder. Some pure Clydesdale and Percheron varieties were used for heavy work, but distinguishable breeds were not common at the time.[22] As Ukrainian farmers became aware of the benefits of owning good horse stock, the quality of their animals improved. By 1915, Robert Fletcher, Alberta Supervisor of Schools, was able to report a "very marked improvement" in horse stock among Ukrainian settlers: "Strong heavy work horses from Percheron or Clyde sires have displaced the cayuse, and the horses invariably show good keep."[23]

By 1921 the average western farm included about ten horses.[24] According to a study of Ukrainian communities in western Canada conducted by J.S. Woodsworth in 1917, it would appear that Ukrainian settlers in east-central Alberta were not far behind that average. Of eighty-seven Ukrainian families surveyed in the Lamont district, only one had no horses, sixty-one had up to ten horses and twenty-three had more than ten horses, for a total of 716 horses. Indeed, one family owned fifty horses and another thirty-seven.[25] In the Chipman district, 101 families owned a total of 779 horses. Six families had neither horses nor oxen, three had only oxen, thirty-one kept between ten and twenty-one horses, while one family had fifty-nine horses.[26] All thirty-one families surveyed in the Mundare area had at least three horses, and one-quarter of the families had more than ten horses, for a total of 299 horses.[27]

The Woodsworth report noted (perhaps unfairly in the first instance) that Ukrainian settlers, who were "absolutely" indifferent to the quality of their other stock, were generally

careful of their horses and tried to maintain good stock.[28] This improvement was in part due to the emphasis put on owning and breeding good horse stock by the Ukrainian press in Canada. The 1912 *Kanadyiski Farmer* (*Canadian Farmer*) annual calendar translated into Ukrainian an article by G.B. Rothwell (Dominion Horse Breeder) entitled "Tiahlovi koni u Kanadi" (Draft Horses in Canada).[29] In the 1930 *Farma* (*Farm*) almanac, an article entitled "'Dobryi kin'" (A Good Horse), by a Ukrainian agriculture student, outlined the essential qualities of good horse stock.[30] The 1929 calendar *Klenovyi lystok* (*The Maple Leaf*) carried an article by T. Bodnar, a Dominion agent for the promotion of better breeding of domestic animals, entitled "Hospodarski koni" (Farm Horses), in which he underlined the value of strong and efficient horses to Ukrainian farmers in Canada:

> Belgian farmers, French farmers, German and English farmers breed fine horses. Let Ukrainian farmers not be left behind the farmers of other nations. A farmer needs to think about and improve the methods of managing his farm. He must be mindful that the land be carefully cultivated and that farm animals be of the highest quality. Fine cows, good horses, good sheep. The better the breed of domestic animals, the more benefit they will bring their owner.[31]

In Canada, Ukrainian immigrants initially replicated the rough, handmade harnesses they had used in Europe. These early harnesses were made largely of rope, cloth padding and leather and were simple in design and construction, without belly bands, back breeching, hip pads, straps, hames or shoulder collars. Each consisted of a simple and loosely fitted breast collar and two traces or tugs leading back to the vehicle being pulled. The heads of the horses were equipped with simple rope halters without mouthpieces. Eli Tkachuk described the earliest harness his father fashioned for their first team of oxen near Whitford:

> The harness was homemade. He packed farmers' cotton bags with straw and sewed them together to form the collars; heavy ropes formed the tugs while sacks were the back bands and ropes held the harness under the bellies. The gear worked quite well, considering all the work he had for the animals at that time. Later, of course, better equipment could be bought.[32]

Dr. Joseph Oleskow commented on the suitability of Ukrainian farm harness standards for the Canadian frontier:

> Harnesses made of cloth are not strong enough for operating these machines (harvesting machines) and must be made of leather. It requires experience to know how to deal with these kinds of horses and

harness and with the agricultural machines and those who lack this experience, are completely ignorant in farming according to the local standards....Our man can easily harness a horse if the harness is made of cloth, but it is profound philosophy to him to use a Canadian harness, a philosophy he cannot master. He can drive the half-starved Galician hags with an equal ease, but cannot manage the heavy Canadian horses. Our farmer sits down on the driver's seat, hangs his head and, deep in thought, lets the reins dangle, while the strong Canadian horses, used to a wilful farmer's hand, run around as they like.[33]

In his memoirs, Peter Svarich related the frustration early settlers experienced when dealing with Canadian harness for the first time:

Before long the German delivered the horses. We harnessed them immediately to the new wagon and took them in hand for a try. Everything worked excellently except that we were terrified by the sight of the complicated and tangled harness which we could neither put on or take off. There were too many of those buckles and belts so that we didn't know which to unfasten and which to leave in place. Eventually we learned how to handle the harness, but more than one poor fellow had his problems.[34]

Although Ukrainian settlers in Canada initially found it difficult to understand and manipulate the heavy harnesses that were required and prevalent in the country, by the late 1920s and early 1930s they were on a par with their neighbours. No doubt much of this progress came from simply mimicking the farming techniques of their neighbours. At the same time, the Ukrainian-language press in Canada instructed its readers on the proper selection, use and care of harness for horses on the farm. During 1929, *Farmerske zhyttia* (*Farmer's Life*) published a series of articles on the care of farm horses, which in part dealt with training colts properly to wear farm harness and pull farm implements.[35] The 1930 issue of the *Farma* (*Farm*) calendar included a short article by Vasyl Bodnar, a student of agriculture at the University of Manitoba, entitled "Upriazh" (Harness), which instructed readers on the importance of proper methods of caring for harness on the farm.[36]

Initially, Ukrainian farmers did not outfit their teams with the most complete sets of harness available, because of both the cost involved and the more spartan character of the traditional harness to which they were accustomed. Many would forgo the back harness of breeching, which allowed teams to back up vehicles or implements they were pulling and aided them in slowing down and stopping their loads. Without such a breeching harness

a team had to rear back up into their collars with their necks to back up with a vehicle. Horses had to be trained in this manoeuvre, and those already accustomed to breeching found it a difficult transition.[37]

Horse harness was an essential tool in the operation of any farm site and could be obtained from a variety of sources. Many large towns had resident harness makers who met local needs. If harnesses were not bought directly from one of these local harness shops, farmers would either purchase them through retailers who distributed harnesses for a variety of manufacturers, or order them by mail from the respective companies. Eaton's, Sears, Marshall Wells, McLeod's and the Great West Saddlery Company were all important sources for harnesses.

Draught horses dominated the working of farms and the conveyance of farm produce until the First World War, after which steam engines and later steam and gas tractors became increasingly popular until they dominated after the mid-1930s.[38]

Long after the appearance of gas tractors and the predominant use of automobiles for personal transporation, horses continued to provide most of the power for tillage and general farm work. Only in 1946 did as many as half the farmers in Alberta, Saskatchewan and Manitoba own tractors.[39] During the 1920s the spread of tractors on farms was limited by "the lack of suitable support technology" independent of horses. For instance, there was no reliable farm truck to replace the horse-drawn grain wagon for conveying grain to rail-line elevators.[40] Freighting was more economical with horses. In 1926, only two per cent of prairie farmers reported truck ownership. The average horse in Alberta, even in 1930, cost only $41.[41]

With the settlement of Ukrainians in east-central Alberta came not only the transference of many aspects of that community's material culture, but also the adoption of totally new Canadian items. The draught horse and the accompanying material requirements of this animal demanded adjustments by Ukrainian settlers as a direct result of their location in the Canadian West. The initial acquisition of draught horses by Ukrainian settlers was a source of great pride to them. Photographs of family horses were common; the genealogy of subsequent generations of horses are often engrained in family memory nearly as accurately as the family history itself.[42] Draught horses were central to the critical early stage of Ukrainian settlement in Alberta.

1. Stefanyk's short story *Kaminny khrest* is the classic depicition of emigration in Ukrainian literature. See English translation *The Stone Cross* in D.S. Struk, *A Study of Vasyl Stefanyk: The Pain at the Heart of Existence* (Littleton: Ukrainian Academic Press, 1973), pp. 145-54. The piece was based on an actual Ukrainian peasant, Stefan Didukh, who immigrated to east-central Alberta. See Iuri Klynovyi, "Vasyl Stefanyk's Heroes in Reality," in *Ukrainian Quarterly* 28 (1972): 28–36, and "Diduck (Diduch), Stefan (1839-1911)," in Alberta Rose Historical Society, *Pride in Progress: Chipman–St. Michael–Star and Districts* (Chipman: Alberta Rose Historical Society, 1928), pp. 302-3.

2. Volodymr Kubijovyc, ed., *Ukraine: A Concise Encyclopedia*, vol. 1 (Toronto: University of Toronto Press, 1963), p. 291.

3. Samuel Koenig, "The Ukrainians of Eastern Galicia: A Study of Their Culture and Institutions," (Ph.D. dissertation, Yale University, 1935), p. 122.

4. Ibid, p. 123.

5. Ibid, pp. 130–31.

6. Foreign Section of the Foreign Office, *Austrian Poland* (London: H.M. Stationary Office, 1920), p. 50.

7. D.A. Volkov, *Koniarsatvo* (Kyiv: Vydavnytstuo "Urozhai," 1971), pp. 126–27; Volodymr Shukhevych, *Hutsulshchyna* (Lviv: Naukove Tovarystvo im. Shevchenka, 1899), pp. 77-85; Koenig, "Ukrainians of Eastern Galicia," p. 141; Foreign Office, *Austrian Poland*, p. 51.

8. Koenig, "Ukrainians of Eastern Galicia," p. 229.

9. Ibid, p. 141.

10. Ibid.; Foreign Office, *Austrian Poland*, pp. 50-51.

11. George Raffalovich, "Where the Poplars Tremble (A Peace Idyll in Ukraine)," *Pearson's Magazine* December 1916.

12. Koenig, "Ukrainians of Eastern Galicia," p. 228.

13. J.G. Kohl, *Austria: Vienna, Prague, Hungary, Bohemia and the Danube: Galicia, Styria, Moravia, Bukovina, and the Military Frontier* (London: Chipman and Hall, 1844), pp. 434, 473.

14. Koenig, "Ukrainians of Eastern Galicia," pp. 228–29; Shukhevych, *Hutsulshchyna*, p. 252.

15. Menie Muriel Norman, *A Girl in the Karapathians* (London: George Philips and Son, 1892), p. 54.

16. Grant MacEwan, *Hoofprints and Hitching Posts* (Saskatoon: Modern Press, 1972), p. 4.

17. For more on the initial use of oxen by Ukrainians in Canada see "Koni," *Ukrainskyi holos*, 24 August 1910. The article favours the use of oxen over horses during the initial period of settlement as a stabilizing factor in the economic development of the settler.

18. Ibid.

19. Dr. Joseph Oleskow, *About Emigration* (Lviv: Publications of Michael Kachkowsky Society, 1895), pp. 21–22 (Provincial Archives of Alberta 73.560).

20. William Buryn, telephone interview with author, 22 April 1983; Mike Snaychuk, interview with author, 1 September 1983. The term "cayuse" is synonymous with "Indian pony" in northwestern United States and western Canada. The term derives from the Cayuse Indians of northeastern Oregon and became part of the lexicon of Ukrainians in western Canada. The Cayuse refined the art of horse training and breeding to the extent that individual tribesmen commonly owned fifteen horses, while some wealthier members owned up to 2,000 animals. During the 1800s, horses were traded by the Cayuse to whites in return for a variety of manufactured goods. See Barbara A. Leitch, *A Concise Dictionary of Indian Tribes of North America* (Algonac, Mich.: Reference Publications, Inc., 1979), pp. 83–84; and Carl Waldman, *Atlas of the North American Indian* (New York, N.Y.: Facts on File Publications, 1985), p. 56.

21. Vladimir J. Kaye, *Early Ukrainian Settlements in Canada, 1895–1900: Dr. Joef Oleskow's Role in the Settlement of the Canadian Northwest* (Toronto: Ukrainian Canadian Research Foundation, 1964), p. 348.

22. Ukrainian Cultural Heritage Village Research File, Alberta Culture and Multiculturalism, Historic Sites Service, Anne Ryan, Grant MacEwan Community College.

23. James S. Woodsworth, "Ukrainian Rural Communities: Report of an Investigation by the Bureau of Social Research, Governments of Manitoba, Saskatchewan and Alberta" (Unpublished report, Winnipeg, 1917), p. 145.

24. MacEwan, *Hoofprints*, p. 77.

25. Woodsworth,"Ukrainian Rural Communities" p. 86.

26. Ibid, p. 82.

27. Ibid, p. 75.

28. Ibid, p. 114.

29. G.B. Rothwell, "Tiahlovi koni v Kanadi" in *Kaliendar Kanadyiskoho farmera* (Winnipeg, 1923), pp. 114–15.

30. Iosyf Vavrykiv, "'Dobryi kin'" in *Farma*, 1930, p. 85.

31. T. Bodnar, "Hospodarski koni," in *Klenovyi lystok*, 1929, p. 127.

32. Eli Tkachuk, "Eli and Dora (Nee Topechka) Tkachuk," in *Lac La Biche Yesterday and Today* (Lac La Biche: Lac La Biche Heritage Society, 1975), p. 65.

33. Oleskow, *About Emigration*, p. 21.

34. Petro Zvarych, *Spomyny, 1877–1904* (Winnipeg: Vydavnycha spilka "Tryzub," 1976), p. 109. For a similar narrative by a later Ukrainian immigrant at Vilna in 1928 see "Alex Beraza," in *Lac La Biche Yesterday and Today* (Lac La Biche: Lac La Biche Heritage Society, 1975), pp. 68–69.

35. *Farmerske zhyttia*, no. 43, 22 October to no. 51, 18 December 1929.

36. Vasyl Bodnar, "Upriazh" in *Farma*, 1930, p. 86.

37. Dan Boettcher, interview with the author, 2 November 1982.

38. See R.E. Ankli, H.D. Helesberg and J.H. Thompson, "The Adoption of the Gasoline Tractor in Western Canada," in Donald H. Akenson, ed., *Canadian Papers in Rural History* vol. 2 (Gananoque: Langdale Press, 1980), pp. 9–39. For a history of the

mechanization of Ukrainian farmsteads in east-central Alberta, see Peter Melnycky, "*Mashyna*: Ukrainians and Agricultural Technology in Alberta to 1930," in Manoly R. Lupul, ed., *Continuity and Change: The Cultural Life of Alberta's First Ukrainians* (Edmonton: Canadian Institute of Ukrainian Studies, and Alberta Culture and Multiculturalism, 1988), pp. 100–112.

39. Ibid, p. 10.
40. Ibid, p. 16.
41. Ibid. pp. 16, 25.
42. The research binders and reports of the Ukrainian Cultural Heritage Village, Historic Sites Service, Alberta Culture and Multiculturalism, Edmonton, are replete with information on the integration of draught horses into the farmsteads and townsites of east-central Alberta. The following manuscripts and published reports are of particular relevance: Chrystia Chomiak, "The Makowichuk Stainia: Materials History" (Historic Sites Service, Alberta Culture, 1983); Marie Lesoway, "The Hawreliak House: A Materials History" (Historic Sites Service, Alberta Culture, 1983); Sonia Maryn, *The Chernochan Machine Shed: Ukrainian Farm Practices in East Central Alberta* (Edmonton: Alberta Culture, Historic Sites Service, 1985); Peter Melnycky, "The Radway Livery Barn: A Land Use and Structural History" (Historic Sites Service, Alberta Culture and Multiculturalism, 1983).