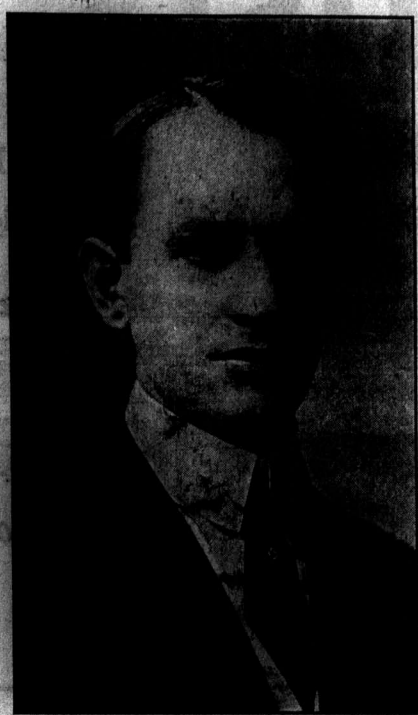


Sask. Wheat and Its Improvement

By Professor G. H. Cutler, Assistant Professor of Field Husbandry, University of Saskatchewan

IT IS not uncommon in one's travels to see fields of wheat in Saskatchewan which reveal a great multiplicity of types. The most common type is described as bald or beardless, with light brown, smooth chaff, and velvet chaff. Another, although less prevalent, type is the deep brown chaff wheat which is also beardless. Not infrequently does one find the bearded types so much in disfavor, but in surprising boldness they obtain on both white chaff and brown chaff. These bearded forms have become the subject of much controversy among farmers owing to the uncertainty of their origin. Club wheats are also numerous. It is a curious thing that this short, blocky type, so far removed in general outward characteristics should be found in such variety among our common wheats. But one occasionally sees bearded and bald, long head and short head, brown chaff and white chaff types. Surely such a mixture is not desirable from the point of view of the grain grower, although a paradise for the plant breeder.



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In order, however, that we may the better understand this polyglot condition so often seen in Saskatchewan wheats it is necessary to turn back the pages of wheat history in Canada. For indeed wheat, like the many people who inhabit this land, has a story of its coming, its beginnings and its settlement. And it, like them, is today still endeavoring to adapt itself to these still new and foreign conditions.

History tells us that among the first wheat settlers to take up their abode in Canada was one which originated in Russia along the southern shore of the Baltic Sea. While spending the winter of 1840 in Glasgow its bright appearance and plump form attracted the attention of Mr. Struthers, a clerk in a grain store in that city. Being on the look-out for wheat immigrants for Canada, Mr. Struthers immediately took occasion to recommend this hardy looking wheat to go to Canada. At this time Mr. Struthers was in touch with Mr. David Fife, a farmer in Eastern Ontario, who was especially desirous of encouraging a large immigration of new and hardy wheats. During the following summer this wheat took passage for Canada and reached Mr. Fife early in the fall. Thence forward it took the name of Fife and later because of its color it was christened Red Fife to distinguish it from White Fife, a wheat similar in qualities.

For many years Red Fife battled against odds in this new land and finally succeeded in adapting itself to a wide scope of country, extending from Western Ontario through Quebec Province, even down to the sea. And yet despite this wide settlement in Eastern Canada, Red Fife found that the humid climate did not favor its highest development. Thus willingly did he accept the suggestion of Dr. William Saunders, then Director of Experimental Farms, to migrate to Western Canada. Settling first in Manitoba and later in Saskatchewan, Fife found that while the climate seemed more to his liking because of its dryness, it nevertheless was too severe. In these days, even during the midsummer, frosts frequently occurred to interfere with the proper development and maturity of this new settler. But through a determination to make good, and the thought of better days, Fife stood firmly by his resolution and stay he did. He never regretted his decision. For just at this period more and more grain growers migrated to the West and North; new lands became broken and tilled and through the instrumentality of the Experimental Farms Red Fife extended his domains far beyond his most sanguine expectations. It seemed for a time that soon the whole of Western Canada would enjoy his benefits. These hopes, however, were not to be realized, for while wide settlement was possible, thick settlement was hampered owing to climatic barriers. In certain parts, more especially the scrubby areas, and as well the heavier soils in the open plain country, climatic changes some seasons spoke in language so plain but emphatic that Red Fife was brought to a definite realization of his serious limitations. Nature however, was not to be denied the fullest benefits of this wonderful settler.

It was during these stirring days for

Fife (the early and middle eighties and early nineties) that a great influx of wheat settlers took place. Russia continued to contribute of her best, and although contrary to Canadian immigration laws, India poured forth from her very strongest and noblest blood. The majority of these new settlers heard first of Canada while sojourning for a time in England. Here they naturally became intimately acquainted with the London Corn Exchange who induced them, upon the recommendation of Dr. Saunders, to come to Canada, as there were still illimitable tracts of land awaiting settlement for the asking. As a result Ladoga, a Russian wheat, from a latitude 600 miles north of Ottawa, and Omega, another Russian wheat from near Archangel, and several Indian wheats, together with twenty-eight others of unknown origin came on one ship load for Canada. Many of these were never heard of again, others gave an excellent account of themselves. Of Indian origin the most noted proved to be Indian Karachi, Indian Hard Calcutta, Indian Red Calcutta, Indian Club Calcutta and Gehun. Although the growing season was cut short by late spring, and early fall, frosts, it suited their normal development infinitely better than it did many of the older settlers, which by this time had considerably multiplied. Ladoga too, found that even where Red Fife could not survive comfortably her health was little interfered with.

Contemporaneously with this settlement was a heavy immigration of American wheats. Unfortunately few of these wheats were able to withstand this northern climate since they were accustomed to a much longer season. Of the many to come across the border the Blue Stem of Minnesota perhaps because of its rather marked similarity to Red Fife, was the only one to locate permanently. Soon all traces of the others had disappeared.

This era, outstanding for its remarkable immigration was followed by one just as remarkable for its material development. Dr. Saunders, fully realizing his responsibility to these wheats for their settlement, kept in close touch with them throughout all their struggles. His keen foresight and kind guidance was largely responsible for the springing up of many new communities here and there over the whole of this western country. Marriage and the giving in marriage was a very common occurrence. Dark skinned Indian princesses became the brides of Russian princes, and Russian princesses won the admiration and affection of Indian and American suitors. Wide settlement continued apace, to the north and west as old homes became overtaxed; the early inhabitants in the meantime, one by one dropped out, giving place to a newer generation which in surprising numbers seemed fitter to serve a wider field of usefulness than the majority of the older settlers.

Among the most enterprising wheats

to survive and carry on the traditions of the older families the names of Preston, Stanley, Alpha, Huron, Percy, Captor, Admiral, Beauty, Progress, Dawn, Crown, Advance, Vernon, Blenheim, Dufferin, Angus, Dawson, Fraser, Crawford, Jordan, Laurel, Plumper, Blair, Mason, Cartier, Bishop, Ebert, Harold, Essex, Countess, Rideau, Campbell, Weldon, Clyde, Byron, Benton, Cassel, Early, Riga, Nowal, Hastings, Chester later renamed Chelsea, Allan, Marquis, Prelude and many others. Surely nature blesses with a bountiful hand. And yet while there were many descendants left, very few of them seemed to possess the love of adventure or the qualities of adaptation to enable them to settle widely over this new country. Consequently little was heard of the great majority of these wheats. Of those which were possessed of the spirit of their grand sires the names of Preston, Stanley, Percy, Chelsea, Laurel, Alpha, Bishop, Marquis and others will live long in the memories of those who read this article. Such wheats have meant the very existence of Western Canada. Different from Red Fife they could fit into a wider range of conditions and during their early settlement it seemed almost as though the northern boundary of wheat production in Western Canada would be extended far north into colder regions even beyond the Peace River country, where but a few years previous it was considered impossible for wheat to survive.

For sundry reasons, the life of most of these individuals was destined to be brief. In spite of their excellent ancestry Preston, Huron, Chelsea, Bishop, Stanley, in fact all except Marquis of this younger generation seemed predisposed to many weaknesses which gradually unfitted them for keen competition with Marquis. Marquis on the contrary was the very acme of perfection. Born of Indian and Russian parentage, viz., Hard Red Calcutta and Red Fife respectively, he seemed capable of lifting the horizon wherever he chose to settle. He inherited in no small degree the hardiness and strong

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personal qualities of his sire and those qualities of his Indian mother which enabled her from the moment she settled in Western Canada to adapt herself

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