



Locusts!

Winged Invaders of South Russia's Steppes

With introduction by Dwayne Janke

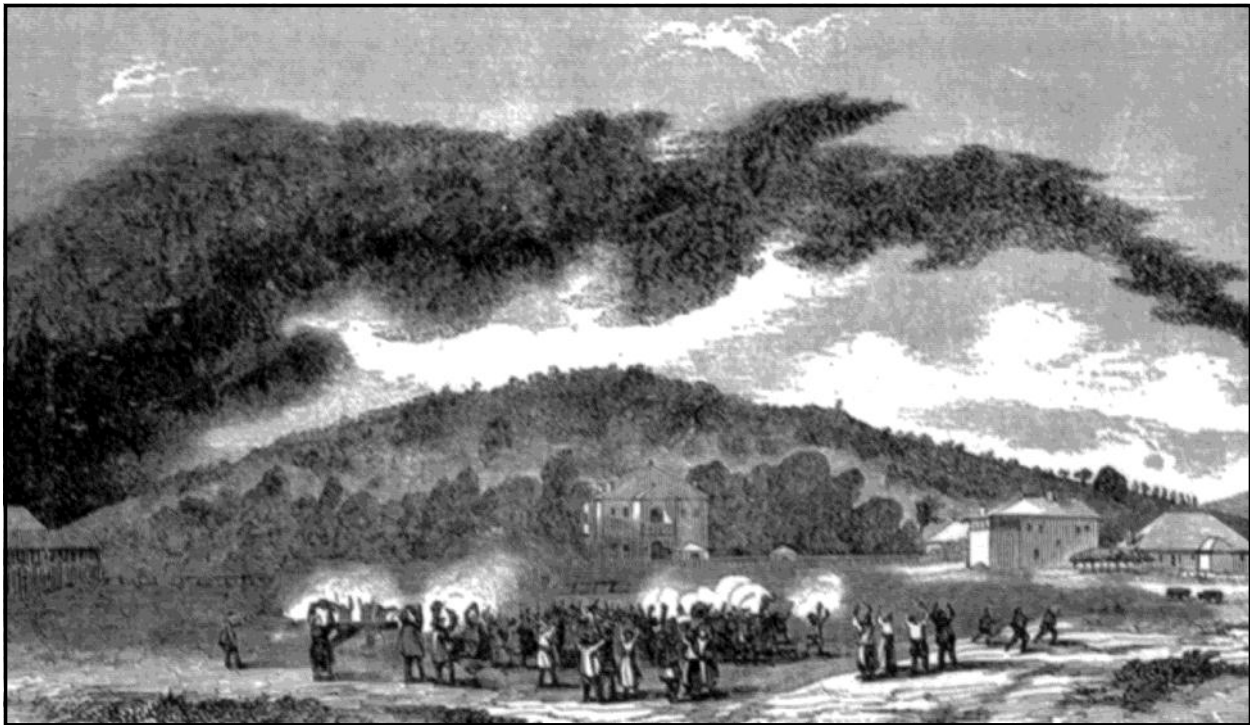
(Originally published in An Illustrated Description of the Russian Empire by Roger Sears, 1855)

In an earlier article I wrote for the *Bessarabian Newsletter* (Vol. 11 Issue 2) (www.grhs.org/rig/bess/newsletters.htm), I explained the ups and downs of grain production in the initial years of settlement in the German mother colonies of Bessarabia.

Village chronicles submitted in 1848 to the Welfare Committee of German Settlers in South Russia indicate a sorry situation in

research of the 1848 chronicles for the other Black Sea colonies. The results were largely the same: one out of every four years had complete crop failures; one out of four years experienced poor yields.)

During the initial years in the Bessarabian mother colonies, infestations of locusts were reported up to *four out of 10* crop years. In years where crop yields were fair, poor or



Locust invasion near Odessa (Kohl, 1838)

those early years. In the first three decades of their existence, the Bessarabian colonies suffered from poor or completely failed grain crop yields *nearly 50% of the time*. Poor yields were those that just barely returned the sown seed back to the colonist farmers; complete failures didn't even return to the farmers the seed they had sown. (Since I wrote that article, I have expanded my

complete failures, locusts were mentioned *73% of the time*.

The 1848 chronicles themselves give further details, using such statements as: "incalculable numbers of grasshoppers frustrated many of the local settlers' hope of a harvest" (Beresina); "the grasshoppers and locusts did very serious damage to the grain" (Borodino); "the crops were destroyed

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by grasshoppers" (Brienne); "great loss due to grasshopper infestation to the grain, causing the colonists to suffer again" (Kloestitz); "locusts . . . reproduced rapidly, which created a severe lack of feed and forced the farmers to sell their livestock at a very low price" (Neu Elft); "locust swarms appeared" (Sarata); "they experienced locust swarms that kept their crops meek" (Tarutino); and "locusts destroyed the fields" (Wittenberg). Chronicles for other Black Sea colonies make similar statements (see, for example, those reproduced in English in *Homesteaders on the Steppe* by Joseph Height, 1975).

But what did these winged destroyers look like? In what quantities did they move? How did they destroy so much? What could our colonist ancestors do, if anything, to fight them?

In his 1855 book, *An Illustrated Description of the Russian Empire*, Robert Sears describes the locust problem in amazing detail. Even more interesting is his reference to the impact of the locust invasions on the German colonists. He does this in several pages of a chapter called "The Steppes of South Russia" (from which the accompanying illustrations are taken). The following is an excerpt that will give the reader an eerie sense of the attacks our ancestors faced by these devastating armies of winged invaders—locusts!

... A small insect ... visits the steppe from time to time, and often marks its presence by the most fearful devastation. This insect is the locust. It is sometimes not heard of for several years in succession, and then again it shows itself, more or less, every season for four or five years together. When the German colonists first came into the country, about forty years ago, the locusts had not been heard of for many years. There were two species of them known to exist, but they lived like other insects, multiplied with moderation, and were never spoken of as objects of dread. About 1820 it was first observed that the locusts had become decidedly more numerous. In 1824 and 1825 they began to

be troublesome; but in 1828 and 1829 they came in such enormous clouds, that they obscured the sun, destroyed the harvests, and in many places left not a trace of vegetation behind them! The poor colonists were in despair, and many of them thought the Day of Judgment must be at hand. They applied for advice as to what they ought to do, but their Russian and Tartar neighbors could suggest nothing, the oldest among them having no recollection of such scenes of devastation, though they remembered to have heard of similar calamities as having occurred in the days of their fathers. Under these circumstances, the Germans set their wits to work, and devised a system of operation, by means of which many a field was rescued from the devouring swarms.

The colonists established for themselves a kind of locust-police. Whoever first sees a swarm approaching is bound to raise an immediate alarm, and give the earliest possible information to the *schulze*, who immediately orders out the whole village, and every man, woman, and child, comes forth, armed with bells, tin-kettles, guns, pistols, drums, whips, and whatever other noisy instruments they can lay their hands on. A frightful din is then raised, which often has the effect of scaring away the swarm, and inducing it to favor some quieter neighborhood with its presence.

If the locusts have an aversion to noise, they are still greater enemies to smoking, against which King James I of England himself did not entertain a more pious horror. The colonists, accordingly, on the first appearance of a fresh swarm, get together as much straw, vine-branches, and dry dung, as they can, and with these, fires are lighted about the fields and grounds which it is thought most desirable to protect. This expedient, however, is often a complete failure; for when one of these countless swarms has dropped upon the ground, and proceeds grazing along in the direction of the fire, the mere weight of the general mass forces the foremost ranks into the flames, where a few thousands of them perish, perhaps, but their bodies extinguish the fire, and leave a free field for the advancing enemy.

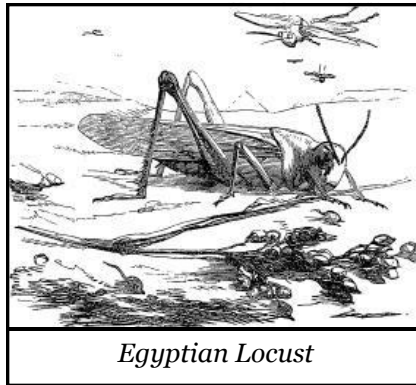
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Sometimes the colonists succeed by means of smoke in scaring a swarm, and making it take to the air again, and then great skill is shown in making it fly away from the fields which it is wished to preserve. If a lake or the sea be near at hand, it is thought a great point to drive the locusts into the water, into which they fall in such enormous masses, that their bodies form at last little floating islands: upon these their more fortunate companions establish themselves, to the height of twenty or thirty inches! If a strong wind blow from the shore, these pyramids of locusts are, of course, driven but to sea, and nothing more is heard of them; but if the wind be not strong, they work their way back to the shore, where they soon dry their wings and prepare themselves for fresh depredations. The millions, meanwhile, that have found a watery grave, give a blackened hue to the foam of the breakers, and lie scattered along the coast in long lines, that look like huge masses of seaweed thrown up by the waves. The cunning of the locusts on these occasions is surprising. A swarm that, with the aid of a strong wind, has been driven out to sea, will often return to shore, not attempting to fly in the wind's teeth, but beating to windward, with a succession of tacks, in regular seamanlike style!

The locusts appear to be aware that, in the village-gardens, they will find many things to please their palates; and, accordingly, they seldom fail to go a little out of their way when they see a village to the right or left of their line of march. The terror of a village attacked by one of these swarms may be more easily imagined than described. Fancy a heavy fall of snow, each flake a little black, voracious insect, and these, as they fall, covering the ground to the depth of two or three inches, while the air still continues obscured by the myriads that remain fluttering about! The roofs of the houses, and every inch of ground about them, are covered by a thick mass of

crawling vermin, crackling, hissing, and buzzing! Every aperture of the house may be carefully closed, yet they come down the chimney by thousands, and beat against the windows like hail! During the locust-years, many of these swarms settled upon Odessa, covering the streets and public places, dropping by hundreds into the kettles and saucepans in the kitchens, invading at once the ballroom and the granary, strutting in the public walks by millions, and displaying their ugly antics alike in the hovel of the beggar and the fine lady's boudoir.

The locusts of southern Russia are divided into two species: the *Russaki*, or Russians (*Gryllus migratorius*), which are about an inch and a half, and the *Saranni* (*Gryllus vastator*), which are about two inches long. Both are equally voracious and equally dreaded, and both are equally produced from eggs deposited in the earth in August and September, by means of a piercing-tube or oviduct with which the female is provided. The animal does not, however, bore merely with its piercer, but thrusts its



Egyptian Locust

whole body into the ground, in order that the eggs may be deposited as deeply as possible. There the eggs continue through the autumn and winter, and it is not till the end of April or the beginning of May that the young locusts begin to creep out of their holes.

The millions of mothers that in autumn sank under the load of their eggs, now start up sixty-fold into renewed life. They have no wings when first born, but their legs immediately acquire vigor, so that they are soon provided with the powers of locomotion. They at once begin to eat, and a rich, grassy plain, if they are undisturbed, will perhaps be eaten bare in a few days; if disturbed, they commence their peregrinations forthwith, and the army seems to increase as it marches along. They go on rustling and crackling, and crawling over one another in heaps. They almost always proceed in a straight line, scarcely any object sufficing to impede their course. They climb over the roofs of the low houses, over fences and walls, march through

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the streets of towns and villages, not avoiding either man or beast, so that the wheels of a cart will at times sink several inches deep into a mass of locusts, while a pedestrian walking through them will often have them up above his ankle! Enormous quantities of them fall down into the ravines, and are carried away by the streams, which are sometimes so thickly covered with the black carcasses, that the water is completely lost to sight! The march of these young locusts is more dreaded even than the flight of the old ones: not having yet got their wings, they are not to be frightened away either by guns or drums; and to attempt to destroy them were hopeless, on account of their numbers — a few hundred thousand, more or less, making but little difference. They are most greedy, too, when young; and, as the grass and grain are just then most tender, the devastation is the more difficult to repair. It is true that, while in this state, their ravages are confined within narrower limits, on account of the slow rate at which they advance, an army of young locusts being seldom able to march more than two miles in a day.

In three or four weeks they attain their full size. In the fifth week their wings are formed, and they begin to fly. From this time on, they cruise about the country in huge swarms, till about the middle of September, when, after an existence of four months, they all perish, but not before due provision has been made for their multiplication in the ensuing year. The largest swarms appear in the steppe about the middle of August, when they are supposed to be joined by considerable reinforcements from the south. Their flight is clumsy, and always accompanied by a rustling noise, which, when a swarm of them flies along, is as loud as that made by a strong wind blowing through a grove of trees. They can not fly against the wind, but, as has already been observed, they know how to work their way to windward, in true nautical fashion. The height to which they rise depends much upon the state of the weather. On a fine day they will raise themselves nearly two hundred feet above the ground. In gloomy weather they fly so

near the ground, that a man walking through a swarm will often be unable to endure the blows inflicted by them as they fly up against his face, but will be obliged to crouch together and turn his back to the current till it has passed away. When flying at a great height, if they discover a fresh piece of pasture-ground, they sink slowly down till they are about six or seven feet from the surface, when they drop like a shower of stones. As soon as it rains, they always drop to the ground. They are rakish in their hours, for they often fly about merrily till near midnight, and seldom leave their roosting-places till eight or nine in the morning. A cloud of locusts is mostly of an oval form, some three hundred yards broad, and about two miles long. Sometimes a cloud will be seen to separate into two or three parties, that afterward unite again. What the thickness of such a cloud may be, it is difficult to say; but it must be considerable, for not a ray of sunshine can pierce the mass, and the shadow cast on the ground is so dense, that, on a hot summer's day, it diffuses an agreeable coolness around. The sudden darkness occasioned by the appearance of a swarm of locusts on a fine day, is quite as great as that which would be caused by a succession of black, rainy clouds. In calm weather a cloud of locusts will fly about fourteen miles in eight hours.

The ground honored by the visit of one of these swarms always assumes the appearance of a field of battle. In their eagerness to feed, they often bite each other; and, when falling down, many break their wings, and are unable to rise again with the rest of the swarm. It is difficult to estimate the numbers of one of these winged armies. The people of the country maintain that, when a large cloud of locusts falls, it will cover a piece of ground nearly three miles long and one broad, and in many places the creatures will lie three and four deep, and scarcely an inch will remain uncovered! If there happen to be a tree near the place, it will seem ready to break under the sudden load. Now, allowing for each insect a surface of two inches by one, and making no account of the patches where they lie three or four deep, it would follow that a small swarm, covering only one square mile, must consist of not much less than two

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thousand millions of locusts! And every one of them, as the Russians say, has the bite of a horse, the greediness of a wolf, and a power and rapidity of digestion unequalled by any other animal on the face of the globe!

Though there are some descriptions of food for which the locust shows a partiality, the creature is seldom difficult in its choice, but eats up every green plant that comes in its way. The leaves and young branches vanish from the trees in a trice; a rich meadow is presently converted into a tract of black earth; the bank of a river is stripped with magical rapidity of its reedy fringe; and not a particle of stubble is left to mark the place where the green grain was waving but an hour before! The sound of the little animal's bite as it grazes, joined to the rustling of its wings, which it always keeps in motion while feeding, may be distinctly heard at a considerable distance: to any one near the spot, the noise is quite as great as that made by a large flock of sheep eagerly cropping the grass. If the grain is quite ripe, the locust can do it little harm; but whatever is still green is certain to be devoured. Sometimes a farmer, on seeing the enemy's approach, will try to save a field of nearly ripe grain by cutting it down and carrying the sheaves home immediately, but the attempt rarely succeeds, for the invading host advances its line of march, undismayed by the mowers, and will eat away the blades faster than the scythe can cut them.

There are few things locusts are fonder of than Indian corn, and it is said to be a curious sight to behold a field of it vanishing before their ravenous teeth. The maize grows to a great height on the steppe, and makes a very imposing appearance as it approaches maturity. A small number of locusts, however, are able, in a few seconds, to perforate the plant like a honeycomb, and in a few minutes not a trace of it is left. Each plant is quickly covered with insects, while others are industriously working away at the root. Blade falls rapidly on blade, and at each fall a little swarm rises, to settle quickly down again with renewed voracity. If the corn was nearly ripe, the farmer has, perhaps, the consolation of

seeing a yellow stubble-field remaining, to tantalize him with the recollection of the hoped-for abundance.

In the costly gardens of the Odessa merchants, the locust is particularly destructive. It does not touch the melons, cucumbers, nor the growing fruit on the trees, but it ruthlessly devours the leaves and the stalks, leaving the fruit scattered on the ground, to wither with the bodies of the slain destroyers. The leaves, tendrils, and young branches of a vine, will be completely eaten away, but the grapes will be found scattered like so many berries below. Every tree in the garden, meanwhile, is bending under the unwelcome load; while the crackling of the branches, the tearing of the bark, and the rustling of the wings, raise a din quite as loud as that of a carpenter's workshop, in which a score or two of men are sawing, boring, and planning; and when at length the swarm takes its departure, it leaves behind it a scene of such perfect desolation as no other animal in the world can equal. Even the dung, of which it leaves an enormous quantity behind, is injurious to the soil on which it falls; and, for a long time after a field has been visited by a swarm of locusts, the cattle manifest the greatest aversion to the place.

German colonists are also mentioned by Sears in other places in this chapter and book. To view the chapter or the entire book online, visit <http://russian-empire.gatchina3000.ru/illustrated-description-of-russia/index.htm>.

Dwayne Janke is the grandson of four Bessarabian-German grandparents. His interest in family history began with a 9th grade history project and has led him to ancestral villages in Germany's Black Forest region. His interests include not only genealogy, but also the social, cultural, and religious history of our ancestors. He's been a frequent contributor to the Bessarabian Newsletter, advisor/contributor to the Heritage Review, and helped produce an English-language version of the film "You Land of My Forefathers' Choice: History of the Bessarabian Germans." He is an editorial manager for Wycliffe Bible Translators.