

This is UNEVALUATED Information

25X1

The First German Occupation, 1915-1918

25X1

A. General Notes-Sources

1. The German occupying forces of World War I established a military administration in Lithuania and retained it, since the battle lines were close by in White Ruthenia - Lake Naroch, Molodechno and the swamps of Pinsk. The regulations and orders which were published in newspapers and posters were limited and strictly military in character. Not many of them remain available today and source materials for studying the period are difficult to locate. Most of the following material on the occupation during World War I comes from eyewitnesses who lived in Lithuania then but now reside in the US, and from their recollections of the time as available in publications.(1)
2. The first phase of the war between Germany and Russia was favorable to the latter and in 1914 its forces drove deep into East Prussia. The Germans struck back during the winter of 1914-1915, drove the Russians back and occupied a portion (Suwalki) of the Lithuanian Province, which they held until the summer of 1915. Then they attacked again and occupied all of Lithuania as well as part of Minsk. They held these positions until the Russian Revolution in 1917 when they moved deeper into White Ruthenia. Following their defeat in the west and the Armistice of November 11, 1918, they withdrew to Germany. The last German troops left Lithuania early in the autumn of 1919. The Germans held Lithuania for three years, or, from the point of view of this study, three logging seasons.
3. The German forces included an area of 63,270 square kilometers in the region which they considered as Lithuania.(2) They used the same sub-division system as the Russians had left, but increased the number of counties and townships so as to more easily control the country's economic life. German military men were given all administrative positions of importance. Most of them were older men who had held similar positions in civilian life. Thus, the Lithuanian forests were controlled primarily by German foresters in army service.
4. The central German organization was the "Oberkommando der Ost Front" or the "Ober-ost." It handled economic and military problems and while it probably functioned adequately in military matters, it was an awkward, inefficient tool in civil matters. An official of the military administration, the "Forest Inspector", was in charge of each political sub-division. County forest masters were responsible to this official. County officers (Kreishauptmann) directed the civil and economic activities of their areas. Township officials (Amtsvorsteher) were responsible to the county officials, and older soldiers were used as military police (2 or 3 in each township). The whole administration totalled approximately 4,000 men.
5. The Germans intended to stay in Lithuania permanently and to colonize the country with veterans of their armed forces. Lithuania was an objective of the "Drang Nach Osten". Therefore, they were eager to replace the Russian administrative system with their own. They introduced the metric system. Their laws, based on military requirements, were cruel and ruthless. Civil rights were strangled. The Lithuanian populace retained the rights to send its children to school and to go to church, but was forced to work for worthless occupation currency and to contribute heavily of its agricultural products. The inefficient military administration was not able to distribute foodstuffs, etc. properly and, therefore, hunger and cold imposed serious burdens on the population, particularly in the city of Vilno and its surrounding area. The Germans were starving themselves and could do little to ease the situation. They were more concerned with forcing out of the country all the labor, food, and raw materials which could be obtained.
6. The import of goods into Lithuania halted completely. The occupation currency, the "Ost-mark or Ost-ruble" was worthless except for paying the high taxes. Officially, the "Ost-mark" was equal in value to the German mark (100 pfennigs) and two "Ost-marks" equalled one "Ost-ruble". The latter was a parallel

monetary unit valued (officially) at 46.25 Russian gold kopeks or approximately US\$.24. Prices at the beginning of the occupation were low but climbed quickly and steadily. The black market flourished and a barter market was set up which was unsuccessfully fought by the German authorities. Banditry forced the German officials to withdraw from the countryside into the protected towns. As a result, the Germans ruled the country by day and the bandits by night.

#### B. The Forest Economy Production

1. The Germans did not change the property relationships of the Lithuanians but restricted them severely. Real estate holdings could not be divided, given away, sold, or burdened with credit. Collection of debts by Lithuanian creditors was impossible because official evidence of the debts had been removed with the Russians. If taxes and payments in kind were not made, the Germans would take over the land of the delinquent and work it with peasant labor under the direction of inexperienced soldiers, as they did the estates abandoned by the gentry who had fled to Russia.<sup>(3)</sup> It was an emergency procedure and generally a bad one. State forests were exploited very ruthlessly without regard to the economic or scientific principles of forestry. The properties close to the fighting lines were heavily restricted as to access and use.<sup>(4)</sup> Final property regulations and settlements were postponed until the war's end when the Germans intended to colonize Lithuania. In the meantime, all regulations were temporary and designed only to suit the needs of the military.
2. While the occupation was comparatively short (3 years), the forests were highly exploited by the Germans, and forest density dropped 1%. Changes in the forest yields, age, quality, and make-up were considerable.<sup>(5)</sup> A German forest master (army officers of various rank) was in charge of the forests of each area (17 in all, averaging 1-2 counties each)<sup>(6)</sup> Their areas of responsibility sometimes included two or three of the former Russian forest-master districts, and they lived in the dwellings formerly occupied by the Russian officials. At these places, convalescing German soldiers (sick or wounded) maintained horse herds for the army. They also, under the forest master's direction, enforced military law, assisted the county authorities in their duties, and guarded prisoners of war who worked in the forests. The forest masters directed the activities of foresters (primarily former logging masters in German forests) who held the rank of sergeant. There were 3-4 of these under each forest master.
3. In the area which later became the Republic of Lithuania, there were 14 German forest masters and 56 German foresters plus a guard force of about 2,000 Lithuanians. There were also one or two forest masters in Vilno. This compares with a former Russian force of approximately 50 forest masters, 50 other professionals, and 120 range riders, plus 2,000 forest guards. The Russian force had been inadequate so it may be seen that the Germans were very understaffed. The forest masters were responsible for protecting the forests and for producing as many wood and forest by-products as possible with the available peasant and prisoner of war labor. The foresters supervised the exploitation of the forests and managed the forest guard. Both the forest masters and foresters were mounted. Their only reimbursements were their army salaries and rations, a place to live, and fuel to heat it. They were, on the average quite honest, but towards the end of the occupation when the population of Germany was on the verge of starvation, they became less scrupulous and began to sell the wood from the supervised forests for their own gain.
4. The personnel of the forest guard was about the same as under the Russian administration. They were experienced and very useful to the German authorities. They continued their duties of guarding the forests and of exploiting the auxiliary production of the woods (e.g. berries, mushrooms, hops, nettles, hazlenuts, acorns, etc.). These were collected and delivered to collection points for distribution to Germany. The work was done by children under direction of the guards. The guards had the additional duties of watching the forests for the presence of strangers and of organizing local labor forces for logging operations. Their pay was miserable - 16 marks, the same as a German private. The German soldier could buy something with his pay at army canteens, but the forest guards could buy nothing with their money and for all practical purposes, they worked for nothing. They were willing to hold their positions, however, because the lands they used as partial reimbursement for their labor were tax-free and they did not have to make the burdensome payments in kind or labor required of the other peasants. Traditionally, the guards continued to cooperate (for bribes) with their neighbors in the misappropriation of timber from the forests.

5. The presence of bandits in the forests was a phenomenon of both World Wars. Originally, the bandits were escaped prisoners of war who fled mistreatment, starvation, and hard work. They fled en masse and invaded the larger forests where they lived in caves. At first the Germans tried to subdue them, but the occupying forces were not adequate for the task and the bandits had to be left alone. The guards had to coexist both with the dangerous bandits and with other, more harmless fugitives. The forests were very dangerous and German officials stopped visiting them. The bandits outnumbered the police reserves and held the forests and countryside in a reign of terror. The German occupation economy was severely hurt and the abandoned forests were ruled by the guards in cooperation with the bandits. In some cases, the guards even had to pay tribute to the bandits.<sup>(3)</sup> While theft of wood from the forests at the beginning of the occupation had been possible, by the end it was the rule. The German foresters, desiring to trade wood for fat to send to their starving families at home, found that their deals met stiff competition. Structural and fuel wood could be taken without much difficulty and the job of forest guard became desirable, difficult to get, and costly (The successful applicant had to spend a good deal in the way of bribes and tips.).
6. The system of management in the private forests of the gentry and peasants did not change appreciably. The German authorities took over the estates of fugitives which had frequently been occupied by relatives of the owners who had fled from the cities. Resident owners were allowed enough wood from their own forests to cover their needs but were not allowed to cut any for sale. If they had unfulfilled contracts to sell wood which were dated prior to the occupation, however, they were allowed to complete them. The local wood merchant class had disappeared in the chaos of the times and German agents were assigned to supervise the logging operations until the bandits interfered with their operations. These agents outflanked the strict occupation regulations by buying from the money-hungry private forest owners. Thus, the old traditions of misappropriating small amounts of timber were succeeded by a tradition of wholesale theft. This became a major problem for the Lithuanian Republic. The peasants were able to save their own forests because the unlawful supply of wood from the state forests was so abundant.

### C. Forestry Development and Utilization of the Forests

1. The German forest masters were professionally educated foresters and, as such, were equipped to do a perfectly acceptable job in the Lithuanian forests. Some of them were men of high scientific merit who conducted significant research during the occupation (e.g. Professor Stechow), but most of them were older men so engrossed in military requirements that they had little opportunity to display their abilities.
2. During the occupation, there were no professional schools, no research, no artificial reforestation, no professional associations, and no care of young stands. The forests were open to indiscriminate grazing and this damaged young stands very severely. The forests were only exploited during this period. There was no forest economy.
3. The Russians had taken all their plans and data on the forests with them when they evacuated. The Germans worked blindly, having only military maps (1:100,000) as a tool. They used simplified methods to determine productivity. An accurate determination was not necessary because the state forests had sufficient stands of ripe timber to meet the German needs. Cutting was not according to the principle of sustained yield, but simply determined by those areas in which the wood was most abundant, available, and easy to transport. The Germans were most interested in pine, oak and spruce and they cut mainly along main rivers and railroads. The swaths they cut had no particular shape, but usually were 50-100 meters wide and as long as necessary. The cutting went on all year around with no thought of consequent dangers from forest fires and insect damage. The only trees left standing were those too poor to be cut, except in a few areas where seedlings were left standing. Primarily ripe and over-ripe timber was cut, but when it was felt to be necessary, young stands were also sacrificed for their use as posts and pulpwood which were vital to the German war economy. Litter and other wastage of the logging were left in the forests, including some very valuable material.

4. There is no real evidence of the quantities of wood cut during the occupation, but it is clear that they were huge and much beyond normal amounts. Official Lithuanian sources<sup>(9)</sup> indicate that 12,000,000 festmeters of wood were cut (26,172 hectares clear cut, and 38,446 hectares selectively cut).<sup>(10)</sup> These amounts would appear to be exaggerated although they may be close if the timber cut by the native population (especially from autumn 1918 to spring 1919) is included.<sup>(11)</sup> The misappropriations in 1918-1919 were huge. German sources (Biller von Litauen, 1917, p.80) state that 3.5 festmeters per hectare were cut annually, but the Germans counted only the timber actually logged and sawed into various assortments. The wood left in the forests (as much as 20%) was not counted. If one counts it, the cut rises to 4.25 festmeters per hectare. The Germans estimated that they cut a total of 1,375,000 festmeters annually and 4,000,000 during the occupation (1915-1918), 8,000,000 festmeters less than the Lithuanians figured.
5. The net result of the occupation and its policies was to hurt the forests very much. The state forests lost all but remote stands of their valuable large timber and the growth increment for many years. The forests were blocked with fallen timber, and insect and fire damage was accelerated. The most heavily damaged forests were those around Panavezys, and in the forest districts of Alytus, Kaslu Rudos, Priengi, Lekeciai, Kaisiadorys, Kaunas, Simonys, and others.

#### D. Investments

The only investments made by the Germans were those contributing to their war effort. The most important efforts were put into the rebuilding of bridges blown up by the retreating Russians, the change-over of the Russian gauge railroads to the Western European gauge, and the building of a few highways and railroads. They put a good deal of effort into fixing some roads and laying some narrow gauge rail lines to large areas of ripe timber. They brought in many saw mills (captured in other conquered areas) and built many barracks for the prisoners used in the logging enterprises. They set up communications lines, but only for military purposes, not to improve the country. When Lithuania and Germany held treaty discussions in 1922, it was agreed that Lithuania would cancel its demands for payment for the wood taken by the Germans (12,000,000 festmeters valued at 240,000,000 litas) and consider the German investments equal to this amount.<sup>(12)</sup>

#### E. Results of the German Forest Management Program

The Lithuanian forest economy built up at the expense of such great effort by the Russians, degenerated under the German occupation. The heavy logging operations under the clear strip system left open areas as large as 200 hectares and a total of approximately 30,000 hectares completely deforested. The areas which were selectively logged (about 30,000 hectares) were left blocked with debris and fallen timber and the spruce forests, in particular, lost a huge quantity of trees to the bark beetle. The guard was demoralized, and the population as well. The damage done to the forests could not be corrected even up to 1939, and the Republic of Lithuania had a long struggle on its hands to attempt to do so. The occupation was short enough so that the state forests still had some ripe timber remaining, but the forest density declined by 1%.<sup>(13)</sup>

#### F. The Wood Economy and Utilization of Wood

##### 1. Demand

- (a) Demand for wood rose sharply during the war. Many villages, especially at points of Russian army resistance, were burned down. Even towns and cities (e.g. Siauliai, Taurage, etc.) were destroyed and the needs for structural timber rose sharply. Since imports had stopped entirely, glass, iron, cement, petroleum and other materials were unavailable. It can be estimated that the demand for wood per inhabitant rose about 20% to 3.0 festmeters per year.<sup>(14)</sup>
- (b) The German army stationed in eastern Lithuania consumed huge quantities of wood for structures (barracks, bridges, etc.) and fuel. Large quantities of wood were also taken from the Lithuanian (and Polish) forests to rebuild structures in East Prussia destroyed by the Russians. Additional huge quantities were consumed in Germany as pulpwood, timber, and lumber. Never before or since has so much lumber and timber been transported and stored in Lithuania. There are no accurate figures available on the total.

2. Supply

- (a) The Lithuanian forests in World War I, excluding the peasant forests, produced about 3,000,000 festmeters of wood per year. The Germans exploited 300,000 hectares of state forest and 200,000 hectares of private forests whose owners had fled to Russia. These 500,000 hectares annually produced about 1,500,000 festmeters of wood. German sources<sup>(15)</sup> state that no more than 3.5 festmeters per hectare were cut annually. The Germans considered only the assorted timber in collections in arriving at this figure. Taking the wastage into account raises the amount to as much as 4-4.25 festmeters per hectare. Adding the wastage to the German figures raises the total cut per year to about 2,000,000 festmeters. Only about 30% of this was fuel wood since the Germans utilized the wood well, and the balance (about 1,400,000 festmeters) was lumber or structural timber. Thus, during the war (1915-1918) about 6,000,000 festmeters were cut of which 4,200,000 festmeters left the country, but this estimate is still only half of the Lithuanian estimates.
- (b) The population (about 2,000,000) needed about 6,000,000 festmeters annually, but was allowed only about one tenth of this amount. In order to restrict the local demand, the Germans limited the building of new structures and the repair of old ones. Necessary timber for rebuilding burned buildings was very scarce. To construct a building, one had to have the permission, in every case, of the local (German) forest inspector. These individuals were very busy with army matters and requests of the local populace were usually ignored.
- (c) The populations of large cities, especially Vilno, had the hardest times. The Germans expropriated all commerce, transport, and industry; and unemployment was very serious. The military authorities rationed fuel wood just as they rationed foodstuffs. The Germans strictly prohibited the movements of the population to control disease epidemics, and, as a result, the cities had no adequate supplies of wood or food. The rations of food were insufficient to prevent starvation and the fuel ration was not sufficient even to cook with. As a result, the mortality rate of the cities (particularly among children and Jews) was very high. The mortality rate among the Jews in 1917<sup>(16)</sup> was 96.5 per thousand. In the years 1915-1918, the cities lost almost all of their older buildings, fences, furniture and trees. No wood or abandoned buildings could be left unguarded.
- (d) The German authorities did not allow private and peasant forest owners to sell wood from their properties, considering for all practical purposes that they were no longer the owners of the properties but just their users. The only legal way in which they could sell wood was to deliver it to the military authorities who then rationed it to the population. Practically the German order was difficult to enforce and the owners sold some wood, but not a great deal since money was worthless. The local German officials were authorized to sell small quantities of wood to the population. This led to bribery, corruption, and the demoralization of some of the German officials of lower rank (primarily).
- (e) Wood was especially short during the first year of the occupation when the supply from the state forests was cut off. Most of the supply came then, legally and illegally, from private sources. The supply of wood increased after the bandits drove the Germans from the forests as the forest guards allowed the people (for bribes) to take small, and later increasingly large, amounts of wood. By 1917-1918 the supply of wood (except in the cities) was almost plentiful.
- (f) Toward the end of the occupation, not only the Germans but the guards themselves were afraid to go into the forests. As a result, large quantities of wood were stolen. After the German surrender, wide open robbery of the state forests occurred, supported by the approach early in 1919 of Communist armies from Russia. The damage done by these raids and by the occupation was very serious. Some small forests disappeared entirely (especially in lightly forested, heavily populated areas), and others were thinned out very considerably. The larger ranges suffered particularly along their edges.

G. Labor

1. After the war began, the Russians had sufficient time to mobilize the young men in Lithuania into the Russian army. Those unsuitable for army service were taken for other duty and, as a result the labor force available to the Germans in Lithuania was very scarce. The Germans treated the Lithuanians as serfs, exacted heavy taxes and contributions in kind, and enforced virtual slave labor. Pay scales were as low as 1-2 marks a day for laborers and 3-4 marks for a man with a horse. Fed on starvation rations and badly treated, the Lithuanians worked unenthusiastically and participated in passive resistance and sabotage wherever possible.
2. The city people were in a particularly bad situation because they were so dependent on the inadequate German ration. They had to work for the Germans in order to get any ration at all, so recruitment was not a problem for the Germans. Most of the young people were sent to work as forced (called "voluntary") laborers in the forests, on the railroads, on the fortifications of the eastern front, and in Germany itself. Many of them died.
3. The peasants made up the mass of the labor force. Many of their young people hid out from the Germans in barns or in the forests. Some won immunity from forced labor by reason of their need as farm workers. In winter, however, most had to work in the forests. The pay was, of course, very low, but the access to the forests gave them the opportunity to get some wood, legally or illegally.
4. In some forests (around Vilno, Panevezys, Kaslu-Rudos, and other places), barracks and fenced (barbed wire) enclosures were built for prisoners of war. In these areas, the exploitation of the forests was most highly organized and partially mechanized with German equipment (winches, hauling equipment, mechanical saws, saw mills, etc.). The peasants were sometimes able to avoid duty in the forests by pleading that they had no tools. If they requested axes, saws, nails (to shoe horses), iron tires for wagons, etc., the Germans were usually helpless to supply them. The plea of having no tools was a highly effective form of passive resistance and forced the Germans to increase the payment (in wood) and other supplements for such labor.
5. The Lithuanian forests would have suffered even more than they did if the Germans had been able to get enough labor. Labor productivity was very low in spite of threats and punishment. Each year of the occupation, labor grew scarcer as the native population discovered new ways to escape the system. The prisoner labor was particularly unproductive. The prisoners were kept on the point of starvation and their lack of skill ruined tools quickly. They spent as much time as possible looking for things to eat in the forests and worked only when beaten. In the fall, they were able to steal a few potatoes out of the farmers' fields, and this raised their productivity somewhat. Their mortality rate was high, however, and a good deal of their time was spent in planning ways to escape.

H. Logging Operations

1. Logging techniques did not change under the occupation. The principal tools remained the axe and crosscut saw and scrapers to remove bark. Benzine driven saws were tried, but the prisoner labor was not accustomed to them and their use was abandoned. The Germans could not supply enough tools from Germany, and the peasants hid theirs to avoid service in the forests. The year-around operations were directed by logging specialists, primarily Jews, who had done the same job before the war as agents for the merchants.
2. The assortment of wood supplied during the war was quite varied. Pine saw logs 4, 6 and 10 meters long and from 25 cm in diameter were the most important material. Spruce was cut into 10-15 meter lengths in various thicknesses for rafting and 1-2 meter lengths for rail transport. Northern alder, birch and aspen for veneer and match production were transported by rail and were cut in suitable lengths to fit the railcars. Oak blocks for veneer came in 3-8 meter lengths and from 45 cm in diameter. Posts were cut in 8-12 meter lengths and mine timbers in 4-8 meter lengths. Other types included:
  - (a) Cordwood and pulpwood - free of bark, in 1-2 meter lengths, 15 cm and up in diameter, delivered by water; northern alder was primarily for fuel and if over 20 cm in diameter was split

- (b) Hewed wood - railroad ties and pine in various sizes; staves and oak wood in various sizes
- (c) Auxiliary material - poles, crossbeams and piles for rafting and piers

The fabrication of the assortments was generally well done.

#### I. Transportation

1. The Germans did a great deal of work on the transportation system, improving roads and building new ones (especially for supply purposes). In the forests they improved many roads which were used in transporting wood and built narrow gauge rail lines where their use was warranted by timber concentrations or where they could supply saw mills. The roads which did not serve their immediate needs were neglected. To avoid having to do too much road improvement, they concentrated logging efforts along the rail lines and rivers.
2. The peasants with their animals and carts were primarily responsible for hauling in the forests, except that the German army supplied horses for the prisoner labor to use. No mechanical hauling was used. The peasants were forced to perform this work, but, as a result, they were occasionally allowed to buy needed nails, horse shoes, and wagon tires (iron). Hauling distances were short. Hauling on the roads was also by horse cart and for short distances. Payment was inadequate, but not as low as for other types of work because of the short distances involved.
3. The techniques of rafting did not change, except that logs were fastened together in some cases by 6-7" long nails to save wire. While the raftsmen were relatively well paid, they were dissatisfied. They worked, however, as an alternative to deportation to Germany. The Germans used as much rafting as possible to avoid overcrowding the railroads. The timber cut along the main rivers (as well as pulpwood, ties and fuel wood) was floated to Koenigsberg, Klaipeda, Danzig, Vilno and Kaunas.
4. It was impossible to supply the German fighting lines in eastern Lithuania by water since the only suitable river for loaded barges was the Nemunas from Klaipeda to Kaunas. The Germans reconstructed the destroyed bridges and rebuilt the tracks to standard European gauge. They built a new strategic line from Pogegiai to Siauliai and they converted captured Russian rail cars to standard gauge. All rail lines were very busy and worked efficiently. Lithuanian engineers drove the trains under German guard. Trains returning to Germany carried lumber and wood in an amount never seen before or since in Lithuania. The system was adequate to move it promptly before it had a chance to deteriorate in storage.

#### J. Industry

1. Lithuanian industry was badly damaged by the war and by vandals, and, at best, it was weak and undeveloped. The mechanical and chemical industries dependent on wood were particularly undeveloped. There were a few saw mills, cardboard and match plants, and furniture and wagon manufacturers; but they were entirely inadequate to supply the huge requirements of the German army and nation. The sawmills (70 in the territory of the later Republic, produced about 420,000 festmeters of lumber per year) plus other branches of the wood industry (20-30,000 festmeters a year) were supplemented by (not more than 50) German mills imported by the authorities and set up near the railroad stations.<sup>(17)</sup> 90% of these German mills were destroyed by Lithuanians in the period after the war, but while in use, they provided the Germans with 500,000-1,000,000 festmeters of lumber.
2. The Germans mobilized even the smallest establishment for war production. Every shop worked steadily and the workers fared better than the rest of the population. Carpenters worked on barracks, packing cases, etc.; the wagon workers repaired German transport; and the cardboard and excelsior shops furnished packing for army mattresses. Pine resins for turpentine and colophonium were exported to Germany but this production did not develop greatly because of a lack of skilled labor. The existing paper mill was destroyed in the battles of the period.

#### K. Commerce

1. The German military government authority was responsible for activities within occupied countries and, thus, for the management and utilization of the Lithuanian forests. It sold the wood and directed all the transactions carried out by the officials located throughout the country. There was no free commerce in wood.

The official prices charged were those of the pre-war German market. (One festmeter of timber at the stump cost 10-12 marks and one festmeter of fuel wood 3-5 marks.) In addition to this price structure, however, was the black market price list, which at the end of the occupation was 10-15 times higher than the official price list, and the barter market. When the peasants had wood for sale, they demanded payment in clothing, tools and appliances. The gentry were anxious to get labor in exchange for their wood.

2. The tax system drained the money out of the economy, but prices rose steadily (e.g. the price of a farm horse rose from 80-100 marks to 1,000-2,000 and more). The German authorities actively supported the commercial establishments which cooperated with them.(18)

\*\*\*\*\*

FOOTNOTES

- (1) Osman, "Bilder von Litauen", 1917
- (2) Ibid, p. 21
- (3) - - - "Litwa za rzadow ks Isenberga", 1919, P. 857
- (4) Ibid, p. 55
- (5) Skerys, A., Entwicklung and Umfanjdes Litauischen Marktes, 1947
- (6) "Bilder von Litauen", 1917, p.80
- (7) Skerys, A., 1949, p. 13
- (8) Author's experience
- (9) Lietuvos Misky Departmentos Metrastis, 1937, p. 46 (hereafter LMDM)
- (10) Ibid, 1937, p. 46
- (11) Author's opinion
- (12) "Pirmutinis Nepriklomos Lietuvos Desimtmetis, 1955, p. 161
- (13) Skerys, A.,
- (14) Author's opinion
- (15) Bilder von Litauen, p. 74
- (16) "Litva za Panawania ks Icenberja, 1919, p. 16
- (17) Skerys, 1918-40, p. 46
- (18) Bilder von Litauen, p. 56