

UKRAINIAN FARM BUILDINGS

An Architectural History Theme Study



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On the cover:

Lemecha *komora*, ca. 1920.

A *komora*, or tool shed, was a standard component of early Ukrainians farmyards, used to store harnesses, hand tools, small equipment and other items, and often featured a distinctive gable front projection.

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PREFACE

This booklet has been adapted from a larger publication developed in 1982 by the Historic Resources Branch of Manitoba Culture, Heritage and Tourism. That study, *Architectural Heritage. The Eastern Interlake Planning District*, should still be available in public libraries.

That original study was intended to assist various local governments (Rural Municipalities of Gimli and Bifrost and Town of Gimli), formed into the Eastern Interlake Planning District, to gain a better understanding of the architectural heritage of the region, and thus to undertake better educational, tourism, designation and conservation programs. To that end, this original work also contained a substantial selected inventory of buildings in the area, and sections focusing on other aspects of the region's history.

A major part of the study focused on farm buildings, and especially on the prevailing architectural traditions of one of the most common pioneer settlement group in the region – originally from Ukraine, Germany and Poland. It is that section of the original report that has been adapted here, to enable readers to get a better sense of the traditional architectural styles and forms, materials and construction practices that define this important aspect of Manitoba's architectural history.

There are other areas of the province that have similar eastern European building traditions, and this booklet, while focused on the area around Gimli, certainly contains information that applies to those places as well.

EASTERN EUROPEAN BUILDING TRADITIONS

The residences and farm structures built by the three ethnic groups from Eastern Europe, the Ukrainians and the Germans and Poles, provide direct evidence of the influence of another architectural heritage. The numerous Ukrainian structures, unlike Icelandic contemporaries, had features that were often directly transferred from their original context, and are therefore especially interesting. The German and Polish settlers, though considerably lesser in numbers also produced some distinctive buildings worthy of study.

By the time Ukrainian immigration to Canada began in the 1890s, folk architecture in the Ukraine had been developing since the fourteenth century. Styles and techniques of construction had become entrenched in the culture, and in many cases they reached a high level of skill and artistry.

The peasants, operating within a very restricted economy, constructed their homes with a minimum of materials, which included timber, mud plaster and grass. These items were common to all Ukrainian folk dwellings, and appeared in varying proportions depending upon their availability. Although distinctive regional characteristics had developed in response to local economic, environmental and social factors, most of the traditional folk housing followed a relatively basic form (Figure 1).



Figure 1
Examples of folk houses in districts of
the western Ukraine at the close of the
nineteenth century (V.P. Samojlovych,
Ukrains' ke Narodne. Kiev: Navakova
Dumka, 1972)

The rectangular plan of the typical Ukrainian folk dwelling always allowed for two major interior spaces: the "Velyka Khata" (large room) at the east end and the "Mala Khata" (small room) at the west end.

The plan was invariably oriented east-west longitudinally, the only entry and most of the windows both facing south. The Mala Khata was the family work room where the hub of daily activity occurred: cooking, washing, eating and sleeping. It was here that the traditional massive clay cookstove or "pich" was located. The large food preparation area and cooking surface of the pich was often used as a sleeping area for the children as it radiated heat long after the fire had ceased to burn. This was especially useful during the cold winter months. The larger of the two major rooms, the velyka khata, literally "the big house", was accorded special status. The room was usually used only on ceremonial occasions such as Christmas and Easter, or for the reception and accommodation of guests. Larger families, more pressed for space, would use the room as the parents' bedroom. The east wall of this room was traditionally hung with icons, religious calendars, family photographs, and was decorated with embroidered linens and arrangements of dried flowers.

In the western Ukraine, where the majority of the immigrants to Canada originated, log construction was most common. There were three different construction methods used: horizontal log construction with dovetailed or saddle-notched corners, post and fill (known as Red River Frame in western Canada) and vertical log construction in which the walls were secured by top and bottom sills. The horizontal construction method was favoured, but in areas deficient of good timber, post and fill construction was common. The vertical log method was used only occasionally.

The Ukrainian cottage was usually finished inside and out with a thick layer of plaster. It consisted of a mixture of clay, sand, and water, supplemented with a combination of chopped straw and horse or cow dung (to prevent the plaster from cracking as it dried). This plaster parging sealed and insulated the walls. A coarser base layer was generally covered with a finer-grained finish to which lime and dyes, such as laundry blueings, were added. These procedures brought out the whiteness of the lime and provided the walls with a smooth hard finish. Patterns were often traced out with blue or yellow dye over the white of the lime, or else a wide band of colour was applied to the lower portions of the walls.

The steeped thatched roof was one of the more distinctive features of the dwellings in the western Ukraine. Although the thatch material often varied, rye straw was preferred for its durability. The thatch roof was cheap and easy to construct, and when carefully tied was not only waterproof but heat retentive. The roof, if properly maintained, could last up to 50 years.

This basic house type saw two distinct regional variations in the Ukrainian provinces of Bukovyna and Galicia, where most of the Ukrainian immigrants to Manitoba originated (Figure 2). The Bukovynians built houses which were generally larger and more ornate than the Galicians (Figure 3).

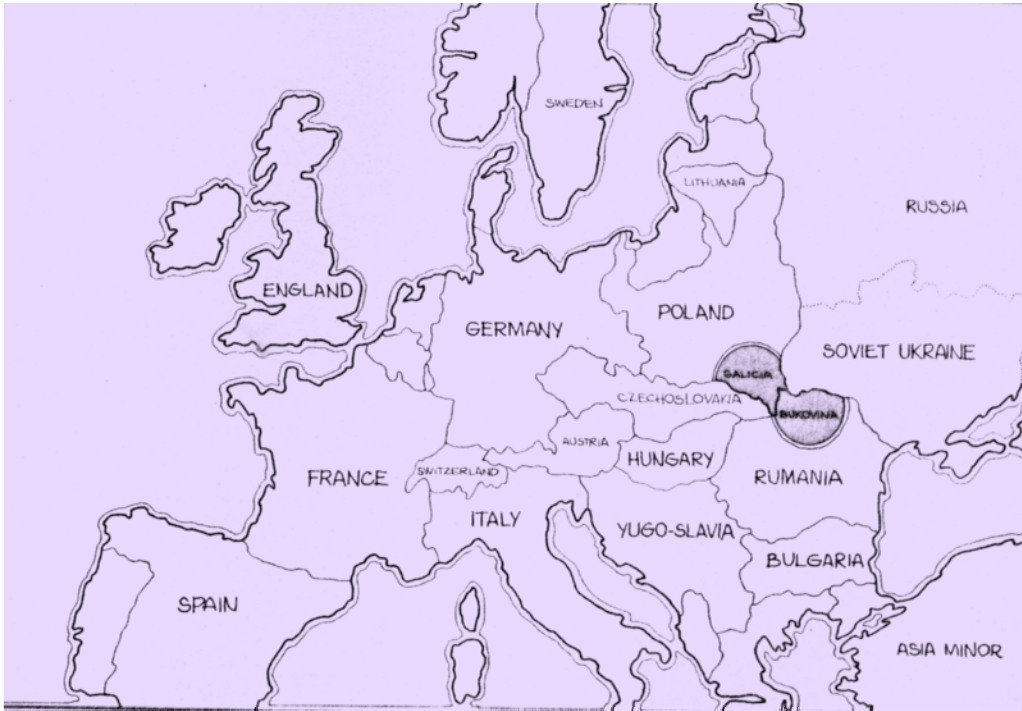
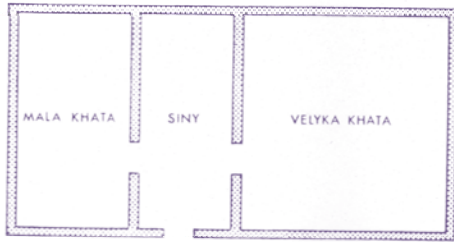
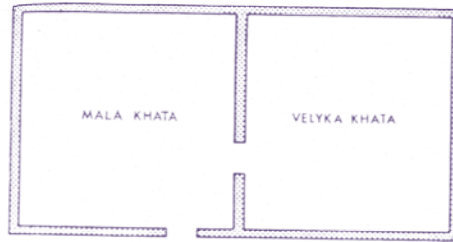


Figure 2
Europe in the 1920s. The locations of the former Ukrainian provinces of Galicia and Bukovyna are identified in the vicinity of the Polish-Rumanian border.



BUKOVYNIAN



GALICIAN

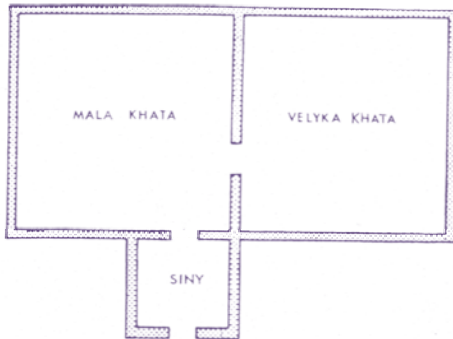
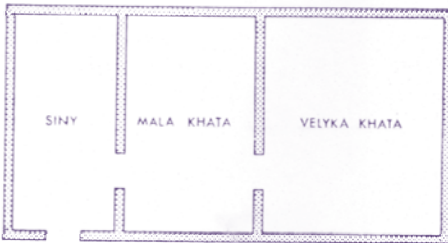


Figure 3
Typical plans of houses built by
Ukrainian settlers from the Bukovynian
and Galician districts.

These were usually three-roomed structures with a centrally located doorway (often sheltered with a gable-roofed porch extension) which opened onto a small entrance hall of "siny" (Figure 4).

They were characterized by hipped or hipped-gable roofs, with a prominent eave overhang on all sides especially pronounced along the front wall. The overhang, supported by a number of wooden posts formed a verandah. At the corners of the house the exterior walls often flared out towards the top to form eave brackets, which were decoratively carved. The houses were further enhanced by decorative patterns and coloured trim.

The Galician style, on the other hand, displayed the influence of the more sober and familiar styles of northwestern Europe (Figure 5). Most Galician houses had only two rooms and a simple gable or hipped-gable roof. Rarely did they have the same prominent overhang, and in consequence eave brackets were less common, and were always less pronounced. The buildings with gable roofs frequently had a distinctive pent extension on each gable end at the eave level to protect the plaster from rainwater damage (Figure 6).

The gable itself was not plastered, but was generally filled with vertical weatherboard. While the first Ukrainian settlers in the Interlake were clearly more familiar with log construction than their Icelandic neighbours, the time of their arrival required the erection of more temporary shelters. The construction of the elaborate log structures of their homeland would have to wait.



Figure 4

An early house built by Ukrainian settlers from Bukovyna. This example stands near Vita, in southeastern Manitoba. (Provincial Archives Manitoba)



Figure 5
An abandoned early Galician house type, near Gimli (Provincial Archives Manitoba)



Figure 6

A former Ukrainian folk house near Ledwyn, Manitoba. The vertical weather boards and prominent pent extension on the gable ends were a common feature on early Galician homes.

EASTERN EUROPEAN BUILDING TRADITIONS IN MANITOBA

First Ukrainian Buildings in Manitoba (1897-1915)

The initial shelters built by the settlers who arrived early in the year were of a temporary nature and were typically occupied for only a month while a more substantial structure was built. Such shelters, known as budahs, were usually crude one-room huts, simple lean-tos or teepees built of small trees and branches (Figure 7).

If the settlers arrived too late in the season to construct a proper house, a more substantial pit shelter would be built in which to pass the winter. In this case, a small pit was often dug into the ground to increase the size of the interior. Local historical literature indicates that such temporary shelters were not uncommon in the Eastern Interlake: Samen and Stefan Demedash, and their families, arrived late in the fall. Since it was too late to build a house they selected a spot on a ridge where they excavated their cellars. Then they made their roofs of dry poplar poles for form teepees and covered them with dry hay and sod. Evidently, they spent a comfortable winter in these huts, while the men walked to their farms every day to erect the skeletons to the farm buildings which they completed the next summer. (Ewanchuk, 1977, p. 66)



Figure 7

A typical temporary shelter constructed by Ukrainian settlers. This example was photographed in northern Alberta in 1912. (Public Archives Canada)



Figure 8

An early Ukrainian home near Gimli, ca. 1905. Unpeeled poplar logs, saddle-notch corner joints, the crudely thatched roof with gable ends of roughly cut planks, and the unfinished plaster coating on the walls are characteristics typical of many early Ukrainian homes. (Provincial Archives Manitoba)

Given the temporary nature of these initial structures, it is not surprising that none have survived in the planning district. The Ukrainian pioneer, after wintering in temporary shelters, or upon arriving early in the spring, set out to construct a relatively permanent dwelling. This structure followed Ukrainian vernacular traditions. However, there was little time or material available to carefully construct the large houses with close attention to traditional elements. Initial houses were small in size and hastily constructed (Figure 8). The walls of these early homes were usually built of thin, unpeeled poplar logs. The corners were secured with crude dovetail joints or, because of the simplicity of the cut, the more popular grooved or saddle-notch. The roofs were either simply stacked with grass or were roughly thatched. The following detailed description of the construction process of a typical initial home was recounted by Peter Humeniuk:

After finding a high spot for the buildings, the homesteader cleared it for the house. Then he dug a well to have water. Next he dug a cellar for the house, about 8' by 6' deep. He found about a dozen stones suitable for foundation, set them into place and levelled them. Then he cut enough trees nearby to build the house having no draft animals, he carried or dragged them by hand. Usually, he peeled the bark off with a drawknife to prevent them from rotting. The foundation sills, floor, and ceiling joists had to be squared by an axe. Where necessary, 1" oak dowels were used instead of nails to hold the logs together.

Ceilings were made from round or split trees and plastered. In many cases, the floor was hard-packed ground and plastered over. The rafters were fastened with oak pegs and well-braced. Door and window frames were made from split logs. Thin willow sticks were nailed diagonally across the outside and inside walls to hold the plaster better. While the men were getting the log grass from the meadow for thatching the roof, the women were preparing clay for plastering. They dug a small pit and with their bare feet they kneaded the mixture into plaster. This they applied with their bare hands to the outside and inside walls and the ceiling. (Figure 9)



Figure 9

Ukrainian settlers applying mud plaster to an early structure of post and fill construction. Usually applied to both the inner and outer walls, the coating sealed and insulated the buildings and also provided for a smooth, finished appearance. (Provincial Archives Manitoba)

The chimney and oven were made of wooden frame and also plastered from inside and outside. Two pairs of door hinges, 2 latches, 2, 3, or 4 small windows and about 5 pounds of assorted nails were the few essential materials the immigrants could afford to purchase for their house. (Humeniuk, n.d., p. 51)

Depending upon the care with which they were constructed, and the economic progress of the settler, most of the early homes were replaced in eight or ten years. The original structure was then utilized as a summer kitchen or was used for poultry. In cases where the first home was retained beyond the initial settlement period, a number of improvements were usually made. These could include the replacement of the thatch roof with one of wood shingles, the replacement of the traditional homemade clay oven with a cast-iron stove or the installation of a lumber floor and manufactured windows and doors.

In the planning district, only a few of these early homes still exist, and most are in very poor physical condition. In addition, most have had major alterations made to them to facilitate alternate uses over the years. The addition of extra doors or windows made the buildings useful as poultry coops while machinery storage sheds could be created with the complete removal of portions of the walls and ceiling. One fairly good example is located at NE 1-18-3E, at the extreme southern edge of the planning district (Figure 10).



Figure 10

The former Lawrence Babiak residence, NE 1-18-3E, 1900. This structure, last occupied in 1948, is possibly the oldest remaining Ukrainian house in the planning district. Although the materials are sound, part of the roof has collapsed as a result of the removal of portions of the east and south walls for use as firewood.

A single storey Galician house, the structure is oriented east-west and has a doorway on the south side. The larger of the two rooms is on the east and the smaller is on the west. The doorway and the chimney are located in the small room, the mala khata.

The walls of this house are constructed of thin logs, peeled but left in the round. The dovetailed notches in the corners are somewhat crudely cut, resulting in loose fitting walls with relatively large spaces between many of the logs. These spaces were filled with wood scraps before the traditional mud plaster was applied. The door and window frames are made of shaped logs, rather than the cut lumber frames commonly found in later homes. A number of interesting connections were used in the construction of this house (Figure 11).

As was sometimes the case with Ukrainian structures built of logs left in the round, diagonal lathing was not nailed to the walls to provide purchase for the mud plaster. The natural undulations of the round logs were sufficient to hold the plaster. The plaster in the Babiak house was given a blue colour finish on the interior and the usual brilliant white lime finish on the exterior.

One of the more interesting aspects of this house is the unusual gable roof shape, which is hipped at one end. Although the original thatch roof has been replaced with wooden shingles, the rafters and roof shape are apparently original. Only one other roof of this type was encountered in the planning district, on a small shed several kilometres north of the Babiak house. Another log structure, possessing several Bukovynian characteristics, is located in the extreme southwest corner of the R.M. of Bifrost (Figure 12).

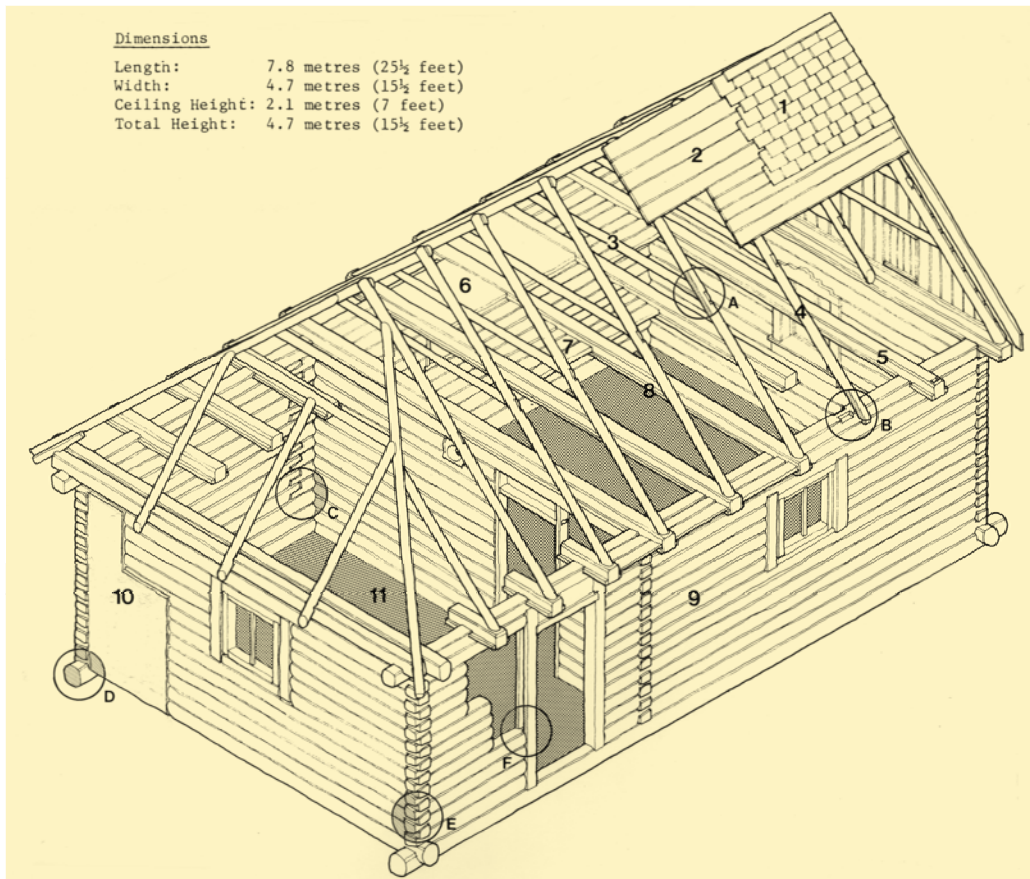


Figure 11
 Babiak house: construction details.

Building Materials

- 1) Roofing: split wooden shingles
- 2) Roof sheathing: 25 mm (1") unplanned lumber; varying widths
- 3) Collar beams: 75-100 mm (3-4") diameter peeled rails
- 4) Rafters: 100-125 mm (4-5") diameter peeled rails
- 5) Joists: 125x150 mm (5x6") hewn beams
- 6) Insulation: 100 mm (4") of earth and clay
- 7) Attic flooring: 50x100-150 mm (2x4-6") planks; laid between joists
- 8) Ledger strips: 50 mm (2") square strips; nailed to joists
- 9) Walls: 125-200 mm (5-8") diameter peeled logs
- 10) Mud plaster: applied to interior and exterior walls
- 11) Floor; earth over 50 mm (2") planking

Connections

- A) Collar beam lap-joint at rafter; nailed
- B) Joist seat notched into top plate; rafters form mortise and tenon peg-joints at joist ends
- C) Side wall lap-joint; nailed
- D) Sill beam and top plate corners: nailed half-lock
- E) Corner and dividing wall: crude dovetail
- F) Framing of openings use tongue and groove joints with mortise and tenon at sill and plate



Figure 12

The former A. Leszczyński residence, SE 5-22-1E, ca. 1910. This structure had undoubtedly been abandoned for many years. All the windows, the door, chimney, and the lumber from one of the gable ends has been removed, but it is still in good physical condition.

The three-room plan with centrally located doorway and chimney are characteristically Bukvynian as is the prominent eave projection on all sides of the structure. Although constructed of thin unsquared logs with saddle-notched corners (both early features) the building exhibits a great deal of care in its construction and was certainly not hastily built. The straight, uniformly thick logs were carefully selected and the corner notches were expertly cut allowing few spaces between the logs.

Later Ukrainian Log Houses (1915-1940)

Once the economic progress of the settler permitted (usually within eight or ten years) the initial house was replaced with a larger more carefully constructed house. In cases where the new structures were built prior to the 1920s, particularly in the older districts in the R.M. of Gimli, outside influences were minimal and traditional forms were common. The buildings were still south-facing, single storey structures of log construction with a two or three room plan and they still had white mud plastered walls and thatched roofs. Many even retained the traditional homemade clay oven and chimney during the early 1920s.

The new houses differed, primarily, in their size and the sophistication of their construction (Figure 13). For several years prior to construction, large, carefully selected trees would be cut and hauled to the site of the new house, where they would be peeled and allowed to cure or dry to prevent later shrinkage or rot. During construction, the help of a local carpenter was usually acquired to help face or square the logs and to cut the notches. In the Eastern Interlake, the dovetail notch was by far the most popular joint for new homes. These later houses were more likely to have a white lime or coloured finish applied to the mud plaster than the original homes and decorative bands or designs were also often painted on the walls. Other improvements included a properly thatched roof, lumber floors and ceilings and manufactured doors and window frames.

Towards the 1920s, as communication with other areas improved, new construction methods and innovations began to be adopted by the Ukrainians in the Eastern Interlake. In the new houses being constructed, and the older homes being renovated, traditional characteristics began to disappear and the buildings took on a transitional hybrid appearance. The earliest deviation from traditional elements was the replacement of the thatch roofs by wooden roofs, first with vertical planking and later with split shingles. As rapid runoff of rain was no longer critical, this was usually accompanied by a lowering of the roof line and slope. A further alteration was the replacement of the homemade wood and clay chimneys and pich ovens with iron pipe and cast-iron cook stoves. Horizontal wood siding, which eliminated the regular maintenance traditional mud plaster-coated walls required, also began to appear on many exterior walls.

There are several surviving examples of this type of home in the planning district. One of the better ones, located in the Shorncliffe district, at section SW 27-24-3E is Galician in style, and is part of a very well preserved set of farmstead buildings (Figure 14).

The house, situated at the top of a small hillock, and resting on a foundation of loose stone, was constructed of logs cut, shaped and fitted entirely by hand (Figure 15). The tight fit of the logs precluded the need for the usual thick mud plaster coating. The walls were simply chinked and then coated with the usual whitewash finish.



Figure 13

The second homes built by the Ukrainian settlers in the Interlake were larger and much more carefully constructed than the initial structures. This example was photographed in 1918 in the Gimli area. (Provincial Archives Manitoba)



Figure 14

The Stelmach house, SW 27-24-3E. This residence is a typical example of the homes being built during the 1920s. Although no longer occupied, the house and property are well cared for and the site is probably the best-preserved Ukrainian farmyard in the entire planning district.



Figure 15

Stelmach house: sidewall - interior wall connection.

By the late 1920s, major changes in building styles appeared and the traditional Ukrainian log house began to lose some of its cultural distinctiveness. A large Bukovynian log residence several miles northwest of Gimli features a number of transitional features, (Figure 16). Interior changes include wallpapering of the walls, and beneath the siding and the presence of thin rail rafters suggests that the structure originally had a white mud plaster finish to the walls and a thatch roof.

By the 1930s, frame construction was becoming more affordable and pattern book frame lumber houses devoid of any ethnic character were replacing the early log homes (Figure 17).

This transformation was slowed during the later thirties by the Great Depression, but by the early 1940s log construction and traditional designs had virtually disappeared. The old homes were relegated to use as storage facilities or poultry sheds. Many were simply demolished.

The majority of the 40 or so Ukrainian log houses remaining in the planning district are of this transitional type. They likely had many of the early traditional elements originally, but in the course of later improvements to the structure these were removed or were covered over. There is not a single example where the traditional thatch roof, clay stove and chimney or much of the interior furnishings have survived. In several examples the original mud plaster finish has remained uncovered by wood siding with the result that only the protected areas under the eaves have not been washed away.



Figure 16

The former S. Cherniak residence, SW 11-11-1E. By the late 1920s, wooden roofs, siding, and rear additions could be found on many of the Ukrainian log homes in the Eastern Interlake.



Figure 17

Wood frame homes such as the one on the left began appearing during the 1930s. The structure on the right is the earlier log home. These examples were found in the Dnister area near Gimli.

German and Polish Houses

During the settlement of the Eastern Interlake area several rural districts were homesteaded by German-speaking immigrants whose language became dominant in the districts of Felsendorf, Haas, Berlo and Rosenburg. By 1915, largely due to poor soils, many of these settlers left the area to return to Europe or resettled in Saskatchewan. The few who did remain, especially in the Berlo district, built structures that are distinctively German. Like many Ukrainian buildings in surrounding areas the typical German house was a single storey gabled structure with a rectangular two or three room plan. Unlike the Ukrainian residences, the German houses had a north-south orientation with the entrance on the west side. The use of post and fill construction, rather than horizontal log construction, also distinguishes the typical German house (Figure 18).

Finally, a prominent flared eave projection along the west and south faces formed a large verandah that was usually supported by rectangular posts. Subsequently these houses were often sheathed with wood siding, extended with a lean-to addition and upper storey bedroom and embellished with decorative mouldings (Figure 19).

Only three log houses and three log farm buildings remain in the Berlo area. The Gottfried house, at SE 27-20-3E is the best German house remaining, even though it has been altered with a new roof, a stucco finish and the removal of most decorative elements (Figure 20).



Figure 18

The corner bracing and the top plate-beam connections used in German post and fill construction encouraged some interesting detail work.

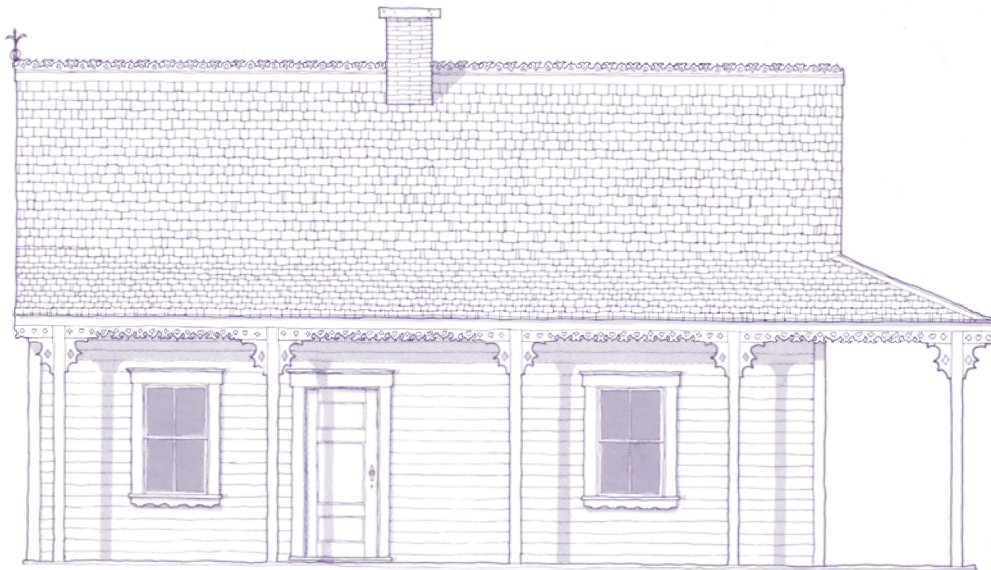


Figure 19

The roof cresting, window and door mouldings and the intricate verandah detailing were typical elements on the German houses in the Eastern Interlake.



Figure 20

Gottfried house, SE 27-20-3E, ca. 1910. The eave projection and the north south orientation with a western entrance are evident here.

Besides the settlers in the Jaroslaw district there were few Polish concentrations in the planning district. Most Poles homesteaded amongst the Ukrainian and Germans throughout the Eastern Interlake. Poles were thus not as distinct an ethnic group and their farm buildings house was, like the other farmstead buildings, unexceptional. It was usually one storey high and its three rooms were covered with a simple gable roof. The one distinguishing feature of the Polish house was its L-shaped plan (Figure 21). Virtually all of these houses had the two sections of the L oriented south and east with the doorway in the crook of the L.

In the Jaroslaw district, where there were more Polish settlers, a distinctive house was common at one time. These 1 1/2 storey gabled structures in the planning district were often covered on both sides of the wall with a thin mud plaster coating. Both of these kinds of houses, like the Ukrainian and German houses, were often enlarged and improved. A second storey was sometimes added, the whole structure was typically sheathed with wooden siding and a verandah frequently graced the entrance (Figure 22).



Figure 21

Polish house, SE 27-19-3E, ca. 1915. The logs used to construct this house in the Gimli area were joined with dovetail notches. Purchase laths were nailed to the walls and a thick mud plaster coating was applied.



Figure 22

Barylski residence, SE 4-25-2E, ca. 1920.

Farm Outbuildings

Because the Ukrainian formed the majority of eastern European immigrants to the planning district, their farm structures are the most common. There are few German or Polish structures and they are generally similar to Ukrainian buildings. A discussion of eastern European farm buildings is thus a discussion of Ukrainian farm buildings. Like their log houses the construction and design of Ukrainian farm buildings were based on folk traditions. A typical early Ukrainian farmyard would have included the house, a barn or "stodola" for a few cows and horses, a "khliv" for some pigs, a "kurnyk" for poultry, one or two "spitlair" or granaries for feed and seed storage, a "kuchny" for summer food preparation, and usually a "komora" for general dry storage. Other standard items in an early farmyard included an outdoor clay and stone bake-oven, a crib-well with a tall sweep or balance beam for drawing water, a small outhouse, and in some cases an open structure used as a sheltered work area.

The styles of the buildings varied, as did the names by which they were known, according to local traditions. The Bukovynians favoured large hipped or hipped gable roofs, while the Galatians preferred the gable roof although their buildings often exhibited prominent front gable end projections. The farmyard complex was often enclosed or at least fronted with a wattle fence constructed of thin willows. The placement of the buildings within the yard varied according to personal preference and site topography, although a rectangular arrangement was most common.

The Ukrainian farm buildings in the Eastern Interlake went through a sequence of changes similar to that of the houses. The crude folk forms of the early 1900s gave way to more sophisticated traditional forms during the 1920s, followed by a period of transition in the 1930s. The post-war years however saw the complete abandonment of the folk traditions for contemporary Canadian designs. These phases, though clearly defined, overlapped each other and occurred at slightly different times in different areas, depending on the time of initial settlement and the economic progress of the settler. At any one time the average farmyard could contain buildings from several different periods.

Barns

As with most other immigrant groups, the initial barns and other farmyard buildings constructed by the Ukrainians were considered only temporary facilities and were rather hastily built. They were generally built of green unpeeled logs using a simple saddle or crude dovetail notch at the corners. The roofs were roughly thatched or simply stacked with grass (Figure 23).

Very few of these early barns still exist in the planning district, and those remaining are in poor condition. One in the Berlo area is a fairly good example (Figure 24).



Figure 23
Early log barn in the Foley area. Feed hay was stored under the thatch-roofed structure in the foreground. (Provincial Archives Manitoba)

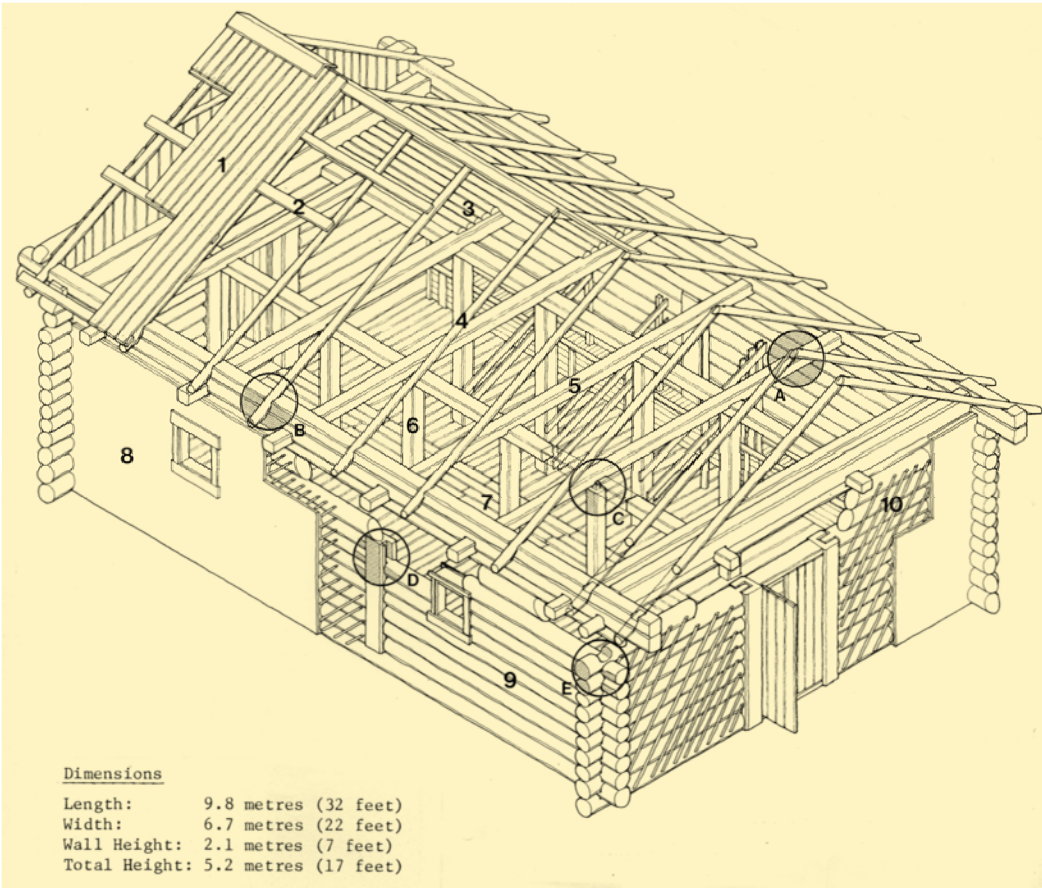


Figure 24
Moga barn, NE 16-21-3E, ca. 1915.

The walls are constructed of 200 mm (7") diameter logs, peeled but left in the round, joined at the corners by saddle-notches and laid on a foundation of loose boulders. The grooved saddle-notch made on the bottom of the logs directs rain water away from the joints and helps prevent rot. Like many of the early structures in which animals were kept, this barn has remnants of a mud plaster coating which sealed and insulated the building, on the exterior walls. The use of diagonal willow purchase laths suggests that this plaster coating was quite thick. The loft floor, constructed of unpeeled rails, was also covered with a layer of mud. Despite its simple construction the building exhibits good craftsmanship (Figure 25). Several interesting connections were used including a tongue and groove sidewall joint and a mortise and tenon peg joint on the interior supporting posts. Although very little remains of its roof, the walls of this structure are still quite sound.

As the settlers became more established and larger amounts of stock were raised, better facilities were soon required. Replacement of the original barn and other farmyard structures usually began within the first ten years of settlement. Although built of logs, the new barns were considered to be permanent facilities and thus were larger and more carefully constructed than the originals. The logs used in their construction were usually faced or hewn square and the more difficult, but tight-fitting, dovetail notch was used at the corners.

While the dovetail corner notch was most common in the Eastern Interlake during this period, several other notches were also used. Buildings were found displaying the lock notch, the lap notch, and the post and fill or Red River frame method (Figure 26).



Dimensions

Length: 9.8 metres (32 feet)
 Width: 6.7 metres (22 feet)
 Wall Height: 2.1 metres (7 feet)
 Total Height: 5.2 metres (17 feet)

Figure 25
 Moga barn: construction details.

Building Materials

- 1) Roofing: board and batten; 25 mm (1") unplaned lumber; 100-200 (4-8") widths
- 2) Purlins: 50x150 mm (2x6") unplaned planks
- 3) Loft floor: 75-100 mm (3-4") diameter rails
- 4) Rafters: 125-150 mm (5-6") diameter peeled rails
- 5) Joists and girders: 200-225 mm (8-9") hewn timbers
- 6) Posts: 200-225 mm (8-9") hewn timbers
- 7) Stable floor: 100 mm (4") square hewn timbers; laid over earth
- 8) Mud plaster: 50-150 mm (2-3") thick
- 9) Walls: 150-200 mm (6-8") diameter peeled logs
- 10) Purchase: 25 mm (1") willow lath

Connections

- A) Rafter lap-joint at apex; nailed
- B) Rafter seat notched into top plate; nailed
- C) Posts form mortise and tenon peg-joints at girders
- D) Guide posts (and framing at openings) use tongue and groove joint
- E) Corner joint: saddle-notch



Figure 26

Lap notches, on the left and lock notches, on the right, were occasionally used in the construction of log buildings in the Eastern Interlake.

Only two examples of the latter were found in the areas of Ukrainian settlement. The Rostkowski barn in the Framnes area is an interesting example (Figure 27).

In addition to the post and fill construction, it has an unusual hipped gambrel roof with split shingles on the crown and vertical board and batten roofing on the lower portions. The building was carefully constructed and displays several obviously well planned design elements (Figure 28).

The gable end hips and lower roof eaves project out over half a metre, protecting the plaster coated walls from rainwash. The eave soffits were left open to improve loft ventilation and prevent spoilage of the stored hay. Large lock notches were used at the corners of the sill and plate logs to help keep the walls square as the building settled, a problem inherent with this type of construction. Diagonal sway braces attached to the top of each corner provided added protection. The vertical channels, into which the log ends were fitted, were formed by nailing two wooden strips to the sides of the supporting posts rather than cutting a groove along the length of the post. This was an easier way of creating a channel and was quite common in Ukrainian built post and fill structures.



Figure 27
Rostkowski barn, SW 4-22-1E, ca.
1925.

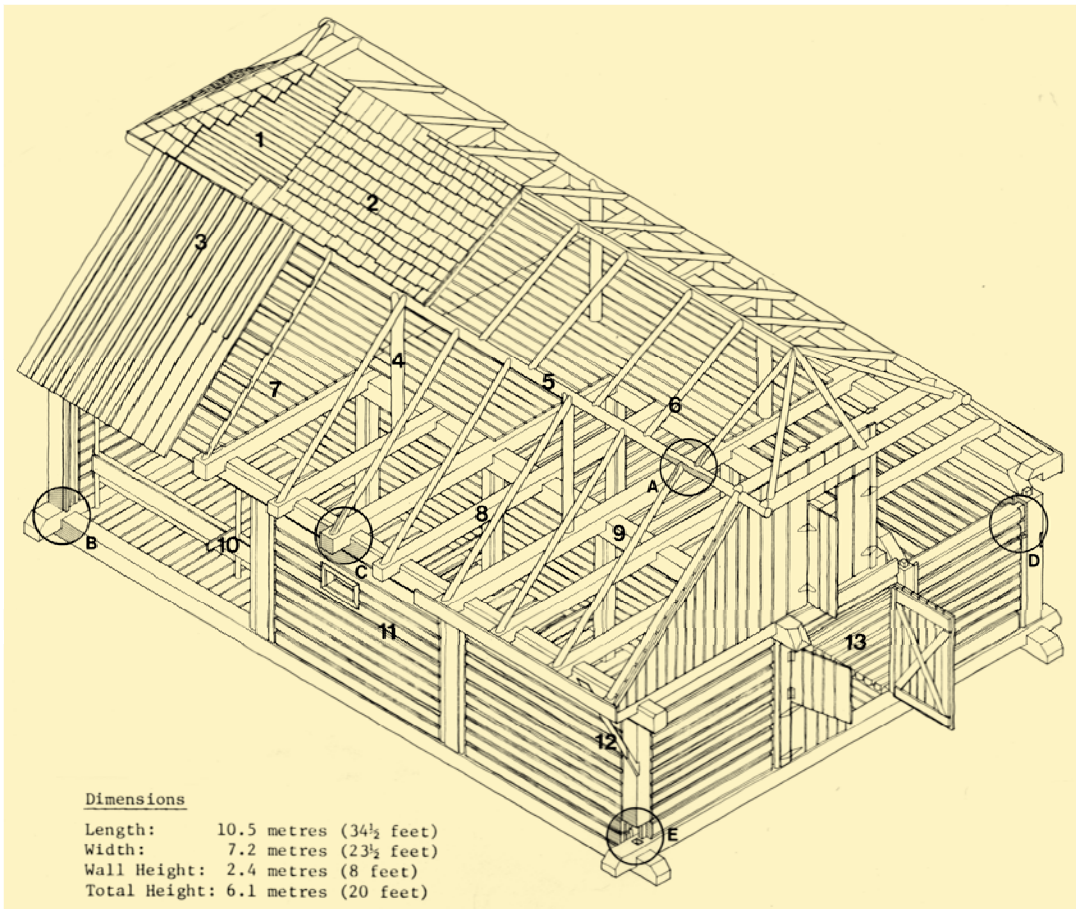


Figure 28
 Rostkowski barn: construction details.

Building Materials

- 1) Roof sheathing: 25 mm (1") unplaned lumber; 100-200 mm (4-8") widths
- 2) Roofing "a": split wooden shingles
- 3) Roofing "b": board and batten; 25 mm (1") unplaned lumber
- 4) Posts: 100-125 mm (4-5") diameter peeled timbers
- 5) Purlins: 100-125 mm (4-5") diameter peeled timbers
- 6) Rafters: 75-100 mm (3-4") diameter unpeeled rails
- 7) Loft floor: 25 mm (1") unplaned lumber; 100-200 mm (4-8") widths
- 8) Joists: 150-175 mm (6-7") square hewn timbers
- 9) Girders: 200-225 mm (8-9") square hewn timbers
- 10) Stall partitioning: unplaned lumber
- 11) Walls: 150-175 mm (6-7") square hewn timbers
- 12) Diagonal bracing: 50 mm (2") widths; set into corner posts
- 13) Stable floor: 125 mm (5") square timbers; laid over earth

Connections

- A) Rafters saddle-notched to purlins; nailed
- B) Sill beam corners: lock-notch
- C) Joists lock-notched at girders and top plates
- D) Wall timbers fit into vertical channels formed by 50 mm (2") squared poles nailed to posts (tongue and groove joint)
- E) Posts form mortise and tenon peg-joints with sill and plate

Prior to the 1920s thatched roofs were still common and were much more carefully constructed than those on the initial buildings. The hipped roof, which was better suited for the thatching process than the gable roof, was quite common during this time and even appeared on Galician structures. Milled lumber was used sparingly during the early 1920s and was usually reserved for the doors and gable ends. The thatched roofed barns rarely had lofts: hay was stored in stacks outside the structure. By the late 1910s new styles and construction methods were being adopted and traditional elements began to disappear. Thatched roofs were replaced with wooden or tin covered ones. With a change in roofing material, the roof shape changed as well. A lower pitched gable shape became common (Figure 29), and the gambrel roof was appearing on many of the new barns being constructed.

This was an improvement over the gable shape as it had a greater storage capacity (Figure 30). The use of concrete foundations and wood siding on the exterior of walls to eliminate the constant maintenance that mud plaster walls required, also appeared during this period.

Despite the depression of the 1930s, frame lumber barns began appearing, although log construction was still occasionally used as late as the 1940s. In many cases these later log barns were constructed with timbers which were sawn square and joined at the corners with a simpler spiked lap (Figure 31).

During the 1930s and 1940s, a variety of building materials, as well as designs, were experimented with. Barn walls were being constructed from poured concrete, fieldstone and an unusual cordwood or stackwall method popular in the camp Morton area.



Figure 29
Kwizina barn, SE 9-24-2E, ca. 1925.



Figure 30
Chomokovski barn, NE 14-24-2E, 1934.



Figure 31
Gislason barn, SW 33-22-3E, ca. 1940.
This corner detail shows the simple
spiked lap joint.

During the post war period, few of the farm buildings constructed by Ukrainians in the Eastern Interlake displayed any traditional elements. They were all frame lumber structures of contemporary design similar to those being built in any other area of the province (Figure 32).



Figure 32
Farm barn, SE 33-21-3E.

Granaries

Although only small amounts of grain were grown during the early years, most Ukrainian farmyards in the planning district included at least one granary. Most granaries were simple, one-roomed log structures with wooden floors and gable roofs (Figure 33).

The walls were carefully chinked, and the exterior was whitewashed to give the building a traditional Ukrainian appearance. Granary walls were rarely given a mud plaster coating.

In later years the interiors of many of the granaries were sheathed with tin to better seal the structure and to help prevent losses to rodents. Bulk grain was not normally handled until the appearance of the self-propelled combine during the late 1930s and early 1940s, at which time granaries of modern design and frame construction were built (Figure 34).



Figure 33
Babiak granary, NE 1-18-3E, ca. 1925.



Figure 34
Granary, SE 33-21-3E, ca. 1940.

Chicken Coops

The chicken coop was an integral part of the Ukrainian farmyard for many years. The raising of poultry was an important facet of pioneer life; they could be used for food, sale, or for feather tick bedding. When the settlers' first house was replaced with a new structure, the original was often converted into use as a chicken coop. The poultry structures were usually low-pitched gable roofed buildings with earth floors and mud plastered exterior walls and ceilings (Figure 35).

Most had only one room, although a few of the remaining examples had a small feed storage room inside the main doorway. A characteristic of these structures, which clearly distinguished them from other small farmyard buildings, was the large window openings along the south wall. This feature provided a bright interior that was necessary for good egg production. A well-constructed chicken coop at SW 27-24-3E is an example that was combined with a hog shed (Figure 36).

After the 1920s, individual structures were constructed especially for this function. Frame lumber structures began to appear during the 1930s on the farms where large flocks of poultry were raised (Figure 37).



Figure 35
Chicken coop, SW 8-18-4E.



Figure 36
Stelmach coop and hog barn, SW 27-24-3E, 1922.



Figure 37
Chicken coop, NW 10-22-3E.

Tool Sheds

Another standard component of early Ukrainians farmyards was the "komora" or tool shed, which was used to store harnesses, hand tools, small equipment and other items. Like the granaries and chicken coops, the tool sheds were small, single-storeyed, one-roomed log structures usually with wooden floors and in some cases, prominent gable front projections (Figure 38).

This projection, accessed from the interior, not only provided additional storage space but sheltered an exterior work area as well. On the Lemecha komora, posts support the overhang, which has a raised wooden platform below. Its expert construction features a variety of carefully cut and fitted connections (Figure 39). One example, at NE 16-21-3E, had a shed-roofed front projection that is now enclosed (Figure 40).



Figure 38
Lemecha komora, SW 23-21-3E, ca.
1920.

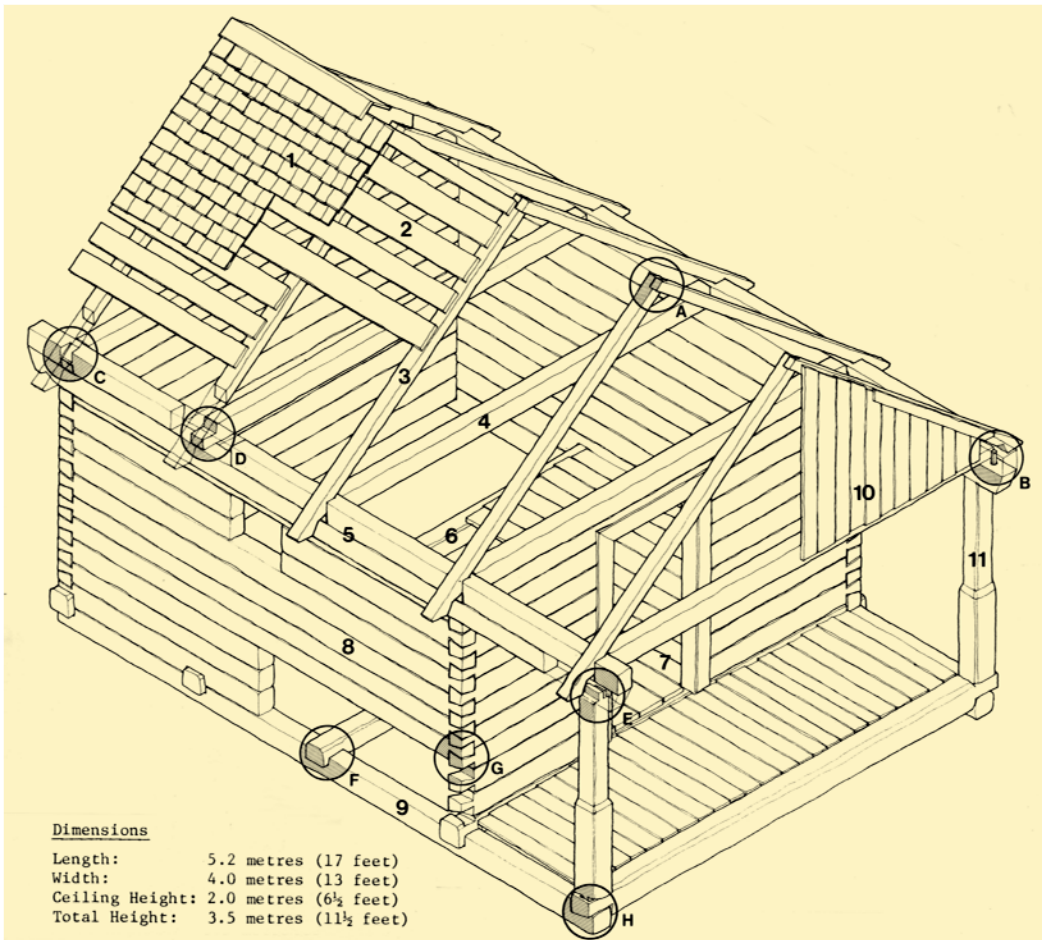


Figure 39

Lemecha komora: construction details.

Building Materials

- 1) Roofing: split wooden shingles
- 2) Roof sheathing: 25 mm (1") unplaned lumber; 100-300 mm (4-12") widths
- 3) Rafters: 100 mm (4") square hewn timbers
- 4) Ceiling joists: 125-150 mm (5-6") square hewn timbers
- 5) Twin top plates: 150x175 mm (6x7") hewn timbers
- 6) Floor joists: 125-150 mm (5-6") square hewn timbers
- 7) Floor: 35 mm (1½") planks of various widths; nailed
- 8) Walls: 150x175 mm (6x7") hewn timbers
- 9) Sill beams: 150x175 mm (6x7") hewn timbers
- 10) Gable boarding: 25 mm (1") unplaned lumber of various widths
- 11) Porch columns: 100x125 mm (4x5") at top; 150x165 mm (6x6½") at bottom

Connections

- A) Rafter lap-joint at apex
- B) Top plates pinned together with 35 mm (1½") diameter wooden dowels
- C) Rafter seat notched into top plate; nailed
- D) Ceiling joist lap-joint at wall (top plate)
- E) Column forms mortise and tenon joint at sill and plate
- F) Floor joist and sill beam form lock joint
- G) Corner joint: dovetail
- H) Sill beam corner: half-dovetail



Figure 40
Moga komora, NE 16-21-3E, ca. 1920.

Summer Kitchens

The summer kitchen, or kuchny, apparently had few antecedents in the Ukraine, but it quickly became a common part of the farmyard complex in the Eastern Interlake.

With the food preparation done in the kuchny during the warm summer months the house was left comfortably cool and relatively free from insects. These structures often doubled as a spare bedroom. Nearby the kuchny stood the traditional outdoor clay bake oven which was used for baking bread and other pastry products (Figure 41).

Only four summer kitchens were identified in the planning district. One featured the gable front projection more commonly found on the tool sheds (Figure 42), while the others had simple gable roofs.



Figure 41
An early bake oven.
(Provincial Archives Manitoba)



Figure 42
Summer kitchen, SE 30-24-3E.