

## ІСТОРИЯ ТА МЕТОДОЛОГІЯ ГЕОГРАФІЇ

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## ETHNIC ASPECT OF NATURAL RESOURCE MANAGEMENT OF THE TERNOPIL REGION DURING THE XII-XVIII CENTURIES

*Keywords:* natural resource management, ethnic originality, land use, agriculture, olericulture, native population, well-balanced agriculture, settlers, tradition.

**Formulation of the problem in general.**

On the initial phase of anthropogenesis, the reclamation of any group or community of a certain territory happened in exclusive accordance with the means of its natural resource potential. Then, if we consider the natural resource management as exclusion, drawing natural resources for life sustenance of a human under conditions of varying geographical circumstances of the planet, it is obvious that communities would form, which exploited their environment differently, acquiring features of ethnic originality. Thus, the use of environmental resources within its ethnos caused its ethnic originality as a combination of methods, techniques, ways to not only successfully survive but to continue living through future generations. The latter received methods of exploitation of natural resources carefully and thoroughly passed by inheritance obtained through trial and error, which eventually acquired the traits of traditions.

Part of ethnic culture, in the broadest sense of the word, was the understanding by each member of an ethnic community the dependence on the environment, the state of which correlates with optimal natural resource management. The ethnos perceived nature as the foundation on which their livelihood could be built, therefore only traditional natural resource management done by the ethnic community took into account the potential possibilities of the ecosystem within the ethnic territory. Thus, the appearance of migrants has always been regarded by the natives as entry of different, moreover dangerous, traditions of resource management formed under conditions of different geographical circumstances. Herein was the danger of destruction, depletion of ethnic vital environment for the natives by the alien population. The territory of Ternopil region as part of the Ukrainian ethnic territory in this context is rather interesting, especially considering its history.

**Analysis of the latest research and publications.**

The first ideas about the interaction of ethnic groups with the environment appeared in the XVIII century in the form of geographical

determinism. Some aspects of functioning of these ethnic communities we can find in the works of Korzhyk V., Panasenko T., Slyvky R., Shtoyka P.

**Presentation of the main material.**

Natural resource management at the regional level was carried out during a long historical period under the influence of various factors, thus changing both in time with the change of the political status of territory and in dimension.

The present territory of Ternopil region, which geographic boundaries were set in 4.12.1939, belongs to the main ethnic array of the Ukrainian nation. The emergence of the first ethnic and cultural entities in the region happened during the V-VI century. These entities were the Duliby, who later played a crucial role in the process of unifying the region, and the Tivertsy tribes who inhabited southern areas. Significant development of the productive forces of the Duliby promoted the ethnic consolidation process that led to the merger of tribes in the Dulibian union of tribes - the first state type association in the region in the VI century.

The unifying processes reached their highest point during the rule of Volodymyr the Great at the same time of the consolidation of the Eastern Slavic tribes into a single ethnic community on the basis of an ancient state - Kievan Rus. The ethnic identity of members of the state was reinforced by the similarity of methods of exploitation of the environment.

In the second half of the XI century, Kievan Rus split into principalities. During that time the Terebovlia separate principality appears on the territory of present Ternopil region. The first written record of the Terebovlia principality dates back to 1084. In the middle of the XII century in the northern part of the region, the Shumsk separate principality appears. Under such circumstances, the cities Terebovlia and Shumsk grew to be political, economic and cultural centers that attracted immigrants - members of other ethnic groups, mainly neighbors (Poles, Hungarians, Lithuanians and Armenians). However, the growth of these principalities was prevented because of the interests of the Kievan and Volhynian princes. As a separate land, the

Terebovlia principality became a part of the Galician principality in 1144. The Shumsk principality became a part of the Volhynian principality in 1157. In the Galician principality, small groups of Czechs started to appear amongst many others, such as Greeks, the Jews of Khazaria, Crimeans, Byzantians and inhabitants of Western Europe. Later in the XIV century, Jews from Lithuania and Poland continued to arrive.

In 1199 the territory of present Ternopil region was entirely a part of the Galician-Volhynian principality - "the first undoubtedly Ukrainian state," according to Ukrainian historian S. Tomashivskiy (Shablii, 2001, p.62). The Volhyn principality and especially the Galician principality were densely populated, their cities were founded on strategically important trade routes from the West, provided the availability of salt deposits contributed to the emergence of merchants from the West and South in their settlements. Many Poles, Czechs, Armenians and Karaites served in the courts of the Galician-Volhynian principality. The Polish presence grew so much over time that in 1275 the formed Roman-Catholic eparchies in Halych and later in Lviv, combined with the generous gifts of land to the Latin clergy was used as an instrument of Polonization. German colonization was encouraged by the Galician-Volhynian princes because of tax exemptions and the rights to self-government.

However, according to historical sources, representatives of immigrant ethnic groups of that time have not changed the ways of their natural resource management, both in their estates, and outside the working natives conserved their own tradition of cultivation, fishing, blacksmithing, pottery, carpentry, weaving and more. Under these conditions, it can be argued that the ethnic diversity of the population in the region did not have a destructive impact on the environment.

Compared to the attacks of foreign enemies from the West in the face of German knights or Hungarian-Polish feudalists who considered the Galician and the Volhynian principalities to be valuable land, the Tatar-Mongol invasion in the middle XIII century was the most tragic, since it caused an economic decline (demands to pay great tribute, devastation of towns and villages, large loss of population). Because of this the border towns, especially the borderline towns, in the form of fortified castles founded for defense suffered destruction, and with them and the environment. In the region, which was the subject of conquest of the Tatar-Mongol invaders the environmental situation deteriorated significantly,

reaching a critical level because of the following reasons.

The researchers argue that the organization and manner of movement of the Mongol army was different from all other armies in the world on two points:

- 1) The Mongol army consisted only of cavalry;
- 2) Mongolian troops travelled with a lot of horses.

In terms of the environmental consequences of this military presence had an extremely unfavorable impact, given its huge size equivalent to an invasion (estimated to be 25 thousand warriors).

During the campaign, the warriors lived off hunting and looting the neighboring villages, and also milked the horses or killed them for meat.

Traditionally the Mongolian army travelled stretched out in one long column followed by carts at the end. The Mongol army stretched out over long distances to give the horses a chance to graze and to give the soldiers a chance to hunt game, which exhausted grasslands and forests. In accordance with strategic plans, the troops stayed at places that were abundant with food and water and avoided areas where these conditions and resources were not available. The scale of the harmful impact can be determined by the number of soldiers and horses.

At dusk the soldiers started small fires, aiming to do it when there was still enough light to see the fire at a long distance, but dark enough that smoke could not be seen from afar. They hurriedly cooked their food at the fire. After dinner, they did not stay up late. The Mongols did not sleep by the fire but in their dugouts. Since at the dawn the army continued their movement, the destruction of landscapes through trampling, grazing and digging dugouts continued, covering new areas. It should be added that during the war they left the corpses in the open.

The success of the Tatar-Mongol invasion also had a negative effect on the environment, because during the siege they used to throw flammable liquid over the walls of the fortresses that lead to fires, in addition to using battering rams and stone throwers. If stone projectiles were not available, they were replaced by wooden logs made from tree trunks that were cut down in the forests.

Historical records show that the domination of the Golden Horde (or yoke) was furthermore devastating in the context of environmental degradation of the conquered lands of the region that were subject to a system of taxes - different types of tributes. They forced the Ukrainian

population to intensify the use of natural resources to survive.

After the collapse of the Galician-Volhynian state in 1340 to the end of the XIV century, there was a significant increase in colonization by foreigners. Land plots became the property of Polish, German, Hungarian and other foreign owners, resulting in a complicated ethnic composition of the population. Thus, the ecological situations related to the exploitation of the environment to obtain cheap raw materials formed.

According to N. Yakovenko perennial wars, Tatar-Mongol invasions caused a lot of estates and households to be desolate. (Yakovenko, 2010). Because land given to the Polish nobility from Mazovia, Silesia and veteran warriors of the hired royal troops needed to be populated, this was achieved with the help of Germans, Czechs, Hungarians and Romanians. So with masters in the region came the foreign peasants who were enticed by settler benefits, according to N. Yakovenko. So the number of settlers in the region grew because of migrant traders, Polish artisans, Germans and Jews (Yakovenko, 2010).

Without taking into the consideration the ethnic identity of the settlers, it is important to note, it is important for us to note that the environmental consequences of the change in the ethnic composition of the region determined that:

1) The majority of settlers represented nobility, armed people or citizens who used local products, thus not harming the environment;

2) The dominance of peasants among the Polish settler population did not transform the nature resource management of the natives, even during the satisfaction of their needs (clothing, housing).

The proof of the latter conclusion is easy to find in the work of S. A. Makarchuk, in which the system of Ukrainian farming is characterized in great detail. In particular, we can find confirmation that farming was traditionally divided into three areas: agriculture, olericulture and gardening. Ukrainians cultivated cereals (wheat, rye, barley, millet, oats, buckwheat, etc.), grain legumes (beans, peas, lentils, etc.) and technical (hemp, flax and false flax) culture due to the dominance of agriculture.

Land use of the native population was well-balanced, since the most common crops spring wheat, winter wheat - were planted on fertile soil, and winter rye - was planted on barren land. Buckwheat was widely grown by the natives in the region. Corn, brought over from Western Europe, began to be cultivated from the XVII century.

Potatoes were brought to Ukraine from South America in the sixties of the XVI century. Sugar beets became a widespread natural raw material for sugar production in the XIX century. Beets, potatoes, onions, garlic, cucumbers were planted in well-fertilized plots. Poppies, fennel, carrots, radish, parsley and other crops could be found grown in small amounts in the gardens of the native population.

The sustenance of the natives of the territory of the modern Ternopil region included not only a list of crops or animal species that formed the ethnic diet, but, systems of use and cultivation as noted by S. Makarchuk, each of which was based on three elements: fallowing, cultivation methods, a certain order of crop cultivation (Makarchuk, 2004). It should be noted that the existence of these three elements in the traditional land use of Ukrainians was the key to balanced agriculture, that has been and remains the fundamental basis of Ukrainian ethnogenesis.

During this process Ukrainians went through various stages: hoe agriculture, slash and burn agriculture, fallowing, two and three-field system of cultivation. Historically, the first tool of Ukrainian farmers was a hoe, a tool used for slash and burn agriculture. The replacement for slash and burn agriculture was fallowing, which gave the soil time to rest by plowing new land. Significant population growth with limited arable lands caused the two-field farming system to appear. All land suitable for cultivation was divided into two roughly equal parts by the peasants: one of them for plowing and growing crops and the other for grazing (Makarchuk, 2004). Each year the functionality of each of the sites was changed so that naturally fertilized pastures were used as arable land, and arable land was used as pastures.

Thus, land use as a part of natural resource management of Ukrainians was not impoverishing, because it was the basis of agricultural traditions, moreover it made survival and social development possible. However, the three-field system was the most advanced in this case. All land suitable for cultivation was divided into three roughly equal parts by the peasants: for fallowing, for winter crops, for spring crops (Makarchuk, 2004). For three years each of these areas alternated their functionality, allowing the land to rest. Ukrainians took care of the state of their soil by the means of crop rotation

Concerning the issue of the appearance of the Polish population in the region and its possible impact on the traditions of the indigenous population of nature, we need to consider the following:

✓ in Polish estates the land was cultivated by Ukrainian peasants in accordance with the established traditions of housekeeping, grain was also grown and cattle was reared.

✓ as noted by most researchers, the main occupation of the Polish population was agriculture, especially grain cultivation, which had much in common with Ukrainians.

In particular, in the early feudal era, fallow land tenure system existed on Polish lands. Fields were used for several years in a row, and when they lost yield capacity a different field was used instead. Later in the XIII century, the Polish switched to the two-field and three-field systems (Alekseev, 2002). Just as Ukrainians, Polish farmers cultivated millet, wheat, oats, barley, rye and later buckwheat. Corn was grown since the XIX century. Concerning the legumes peas, beans, lentils, kidney beans were widespread. In the feudal period the main crop was turnips, and from the XIX century - potatoes, cabbages, beets, onions, garlic, carrots, fennel, tomatoes, cucumbers and more. Apples, pears, plums, cherries, sweet cherries were grown in Polish gardens and only in the XIX century they began growing apricots, peaches, walnuts, currants, gooseberries, and from the XX century - strawberries and raspberries (Alekseev, 2002).

The tool of Polish farmers just like Ukrainians was initially the wooden plough, later and sickles, scythes, harvesters, beaters, threshers. Oxen were used as draft animals. Such similarities in traditional natural resource management of our neighbors were the result of natural geographic similarities and agro-climatic conditions and resources.

The main types of animal husbandry for the Polish and Ukrainians were raising cattle, sheep, goats, pigs, horses and poultry. They were also good fishermen and hunters. Crafts popular in villages were weaving, woodworking, house building, cooperage, furniture making, agricultural implement and household utensil creation, weaving from tree branches and roots (Alekseev, 2002).

The analysis of natural resource management traditions of Polish settlers and the native population shows similarity. Therefore, it can not be considered a destructive influence, especially considering the prevalence of nobility among the settlers.

Similar consequences on the environment had the appearance of different ethnic groups - members of different agricultural traditions.

A separate group of colonists, as mentioned above, was Jewish. The area of occupation of the Jewish population remained traditional - trade,

profiteering, rent, innkeeping and crafts. Regarding the former, there is even a distinct dominance of Jewish merchants possessed approximately of three-quarters of all export of goods. Goldsmiths were typically richer among the artisans, while representatives of the usual crafts - cobblers, tailors, furriers, glaziers - had lower profit than their colleagues Christians. In rural areas, members of the Jewish faith were shopkeepers, innkeepers, carriers of goods. The lifestyle and customs of the Jews had no negative impact on the natural resource management of the Ukrainian population in the region.

In the XVI century, Armenian colonies in Buchach, Pidhaytsi, Berezhany, Chotkiv and Yazlivtsi appeared in the region. Among the Armenians, a certain percentage were common people, and the majority - had relatively high social status and property status. Armenian presence in the lands of the region had no impact on the traditions of natural resource management of the native population, as Armenians usually were merchants and craftsmen and occasionally engaged in raising sheep.

For a long time, the Ternopil region was divided between the two countries, the colonization element was ethnically diverse too.

The Polish colonized Terebovlia, and Lithuanians colonized Kremenets from 1340.

Lithuanians allowed local Ukrainian nobles hold high administrative positions to manage their conquered lands. Expressing unwavering respect for local customs, Lithuanians declared: "We do not destroy the old, do not introduce the new" (Kryvoskiy, 1999, p.119).

Being a part of the Lithuanian state had significant consequences for the native population in terms of changes that have occurred in natural resource management. Firstly, soil fertilization became more intense. According to the Lithuanian Statute of 1529, fertilized soil cost twice as much as not fertilized soil. In Galicia in the XVIII century, there were three types of soil fertilization: gypsum and lime application, manure application, soil tilling. The easiest way to restore soil fertility was to leave the arable land for pasture. The soil was fertilized once in three years in autumn using the three-field system.

To increase soil fertility different forms of crop rotations were used. With the appearance of potatoes, the three-field system was changed to a four-field system or the land was left to fallow. Industrial crops were introduced in the crop rotations. Great landowners started to introduce the many-field system of crop rotation in their estates. From that time the four stage seasonal plowing became traditional. It consisted of four

stages: 1) spring plowing; 2) early summer plowing; 3) midsummer plowing; 4) autumn plowing. As before, rye, wheat, barley, oats, buckwheat and peas were cultivated. In Galicia oats constituted for 34% of grain crops, rye - 24%, barley - 16%, buckwheat - 12%, wheat - 9%.

Under such circumstances, there have been developments in horticulture, in particular, there was an increase in the area of orchards, new varieties of fruit were introduced, gardeners were engaged in grafting. Every home had a garden.

The Galician principality grew of fruits and vegetables in small amounts. However, the economic importance of livestock grew. The need livestock (horses, oxen, cows, sheep) was determined by the internal needs of farms, area of arable lands and hayfields. The number of animals was noteworthy (Makarchuk, 2004). This was due to two factors: the availability of good pastures and large reserves of byproducts in distilleries.

During the XVIII century, especially in the second half, based on previous innovations the specialization in agricultural production deepened. The Galicia region typically grew buckwheat and oatmeal. A feature of agricultures in the second half of the XVII-XVIII centuries was a wide range of goods. . A large amount of the grain in the domestic market was used for urban food production and horilka production, anything else was exported. Agricultural products occupied an

important place in the export markets of the West (wool, tallow, yarn, wax, honey, hides) and various products of crafts (wood and wooden products). Wooden beams, planks, staves, barrels, poles, ash, charcoal, potash and other products were steadily exported to Gdansk and other Baltic ports.

**Conclusions.** Summarizing the results of the study it can be argued that the expansion of ethnic structure of the Ternopil region during a long historical period occurred because of neighboring ethnic groups, who formed their ethnic identity in a system of environmental factors quite similar to those of Ukrainians. Therefore, the environmental effects of colonization did not lead to the destruction of natural resource management traditions. Its main component - land management was not impoverishing as it was the basis of agricultural traditions.

Analysis of the natural resource management of the natives and settlers shows similarities in their agricultural traditions. Therefore, their emergence did not have a destructive factor.

There was some change, because of the increase in a range of crops that were cultivated. However, traditionally responsible natural resource management transformed into an impoverishing one because of the colonized status of the region.

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#### Анотація:

*Ірина Барна, Сергій Барна.* ЕТНІЧНИЙ АСПЕКТ ПРИРОДОКОРИСТУВАННЯ ТЕРНОПІЛЬСЬКОГО РЕГІОНУ ВПРОДОВЖ XIII-XVIII СТ..

Досліджено вплив зміни етнічної структури населення на традиції природокористування в межах етнічних територій. Об'єктом вивчення обрано систему традиційного природокористування корінного українського населення Тернопільської області. Встановлено масштаби впливу на традиційне природокористування українців, як систему способів освоєння навколишнього природного середовища, яка склалась історично на основі тривалого, екологічно збалансованого використання природних ресурсів, з боку мігрантів – представників імперських утворень. Вивчено зміну землеробських традицій автохтонів впродовж XIII - XVIII століть під впливом нововведень польськими, литовськими, німецькими колоністами, які були представниками державницьких етносів. Екологічні наслідки колоніального статусу території Тернопільської області в контексті традиційного природокористування не стали критичними, позаяк державницькі інтереси імперій-завойовниць зумовлювали домінування шляхти, вельмож, що експлуатували корінне населення, яке реалізувало власні традиції природокористування. З іншого боку, селянське населення серед мігрантів репрезентувало землеробські традиції, відтак ментально визнавало необхідність збалансованого землекористування. Аналіз систем традиційного природокористування та землеробства польських поселенців, які становили найбільшу частку, засвідчує значну подібність з такими у автохтонів краю, що мало позитивні наслідки за рахунок розширення кола вирощуваних сільськогосподарських культур, поширення нових сортів фруктових дерев, збільшення ролі садівництва та городництва. Перебування в складі литовської держави мало позитивний вплив на природокористування українців, зокрема, завдяки введенню обов'язкового удобрення ґрунтів в умовах трипільного землеробства.

Значну увагу приділено екологічному впливу на територію регіону та його природно-ресурсний потенціал за часів вторгнення монголо-татарського війська, яке зумовило не лише соціально-економічну, а й екологічну

деградацію компонентів довкілля.

**Ключові слова:** природокористування, етнічна самобутність, землекористування, землеробство, городництво, корінне населення, збалансоване землеробство, мігранти, традиції.

**Анотація:**

*Ирина Барна, Сергей Барна. ЭТНИЧЕСКИЙ АСПЕКТ ПРИРОДОПОЛЬЗОВАНИЯ ТЕРНОПОЛЬСКОГО РЕГИОНА В ПЕРИОД XIII-XVIII ВЕКОВ.*

Исследовано влияние изменения этнической структуры населения на традиции природопользования в рамках этнических территорий. Объектом изучения избрана система традиционного природопользования коренного украинского населения Тернопольской области. Установлено наличие влияния на *традиционное природопользование украинцев*, как систему исторически сложившихся способов освоения окружающей природной среды на основе длительного, экологически сбалансированного использования природных ресурсов, со стороны мигрантов вследствие изменения политического статуса территории. Особое внимание уделено экологическим следствиям монголо-татарского вторжения.

**Ключевые слова:** природопользование, этническая самобытность, землепользование, земледелие, огородничество, коренное население, сбалансированное земледелие, мигранты, традиции.

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Сергій ШЕВЧУК

## КОНЦЕПТУАЛЬНІ ПІДХОДИ ДО ВИВЧЕННЯ НАУКОВИХ ШКІЛ СУСПІЛЬНОЇ ГЕОГРАФІЇ В УКРАЇНІ

*Дослідження присвячене цілісному аналізу процесу формування наукових шкіл в суспільній географії України з детальним розглядом пізнавальних можливостей і конкретних результатів функціонування наукових шкіл різних типів. У статті, реалізуючи поставлену мету, розкрито сутність логічну модель наукової суспільно-географічної школи, обґрунтовано її теоретичний апарат та методичні засади дослідження; проаналізовано фактори формування наукових шкіл в суспільній географії України, проведено періодизацію цього процесу; описано типи наукових шкіл: школи-напрями, науково-освітні та школи як дослідницькі колективи; визначено їх місце, роль та здобутки у формуванні суспільної географії в Україні; наголошено на окремих типах наукових шкіл: районній (як школі-напрямку), школі Українського науково-дослідного інституту географії та картографії (як науково-освітній) та науковій школі акад. М. Паламарчука (як школі-дослідницькому колективу); визначено проблеми розвитку наукових шкіл в суспільній географії України та перспективні напрями їх досліджень.*

**Ключові слова:** суспільна географія в Україні, наукові школи, фактори формування, школи-напрями, науково-освітні школи, школи як дослідницькі колективи.

**Постановка проблеми дослідження.** Нагальною потребою сьогодення є реконструкція розвитку суспільно-географічної науки в Україні, яка дозволяє об'єктивно і неупереджено показати внесок у її еволюцію наукових шкіл та окремих учених. Перед сучасними дослідниками історії географії все ще стоїть завдання розкрити «білі плями» в подіях розвитку науки, відродити забуті імена діячів суспільно-географічної науки України, показати їх реальний внесок в теорію і практику пізнання. Ми маємо нарешті отримати правдиву історію суспільної географії. Дослідження цієї проблеми сприятиме поверненню наукових надбань, вилучених, сфальсифікованих чи просто замовчуваних; допоможе активізувати процес подальшого розвитку сучасної суспільно-географічної науки, а також дасть змогу зайняти їй гідне місце не лише у вітчизняній, а й у світовій культурі.

Метою дослідження є цілісне вивчення феномену наукових шкіл у суспільній географії в Україні з детальним розглядом пізнавальних можливостей і конкретних наукових результатів різних типів наукових шкіл.

Міждисциплінарний підхід історії географії та наукознавства, дозволяє виявляти різноманітні характеристики наукових шкіл і відбрати конкретні ефективні моделі їх вивчення. Виходячи з того, що проблема наукових шкіл у суспільній географії є малодослідженою, одним із напрямів досліджень має стати пізнання теоретичних та практичних аспектів функціонування наукових шкіл, особливої актуальності набуває характеристика тенденцій в розвитку вітчизняної суспільної географії крізь призму виявлення й осмислення її наукових шкіл, визначення ролі і місця суспільної географії в системі наук.

**Аналіз останніх публікацій і джерельної бази дослідження.** На сьогодні у суспільній географії детального аналізу феномену наукових шкіл не здійснено. Доробок сучасних дослідників розвитку суспільної географії в