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the phases of prehistoric settlement evidenced in the lake surroundings. Next stage of studies was to reconstruct the settlement system of prehistoric cultures and to describe the economical base of these communities. From the results of the investigations carried out so far, the first part of this program was successfully completed. It appeared possible to reconstruct a general chronology of the prehistoric cultures near Lake Gościąż. The distribution of sites shows which landscape zones have been inhabited and exploited during different periods of time. Some data were obtained concerning the size of sites and how long the sites could have been inhabited. Many problems connected with settlements and exploitation of the natural environment of this area were, however, only touched. The problem of the Przeworsk Culture near Lake Gościąż remains still unresolved. The lack of sites close to the lake as compared to the heavy destruction of the environment recorded in the lake sediment should be the aim of investigations. There is also a shortage of information about internal organization and economy of prehistoric settlements near Lake Gościąż.

## 9.1.2. SETTLEMENTS AND THE ECONOMY IN THE LAKE GOŚCIĄŻ AREA SHOWN IN PRINTED DOCUMENTS (FROM AD 1300 TO 1700)

## Małgorzata Rybicka & Andrzej Pelisiak

The settlement and the economy in the Medieval and Modern periods can be analysed on the basis of both archaeological material and printed documents. Relatively few documents refer to Medieval settlement in the Lake Gościąż region (the earliest come from 13th century (Nowak 1991)) and the early periods of the Middle Ages. The Medieval archaeological material is rather poor. Results of a surface survey from the area between Wistka and Duninów (Fig. 9.6) are insufficient to reconstruct settlement organization in the Medieval period up to the 14th century. More precise information about the population and economy of the people who lived near Lake Gościąż is contained in later documents: in the 15th century in the so-called Registers of the Royal Lands, and in the 16th century and later particularly in the so-called Surveys of Gentle Land (Posadzy & Kowalewicz 1957, Senkowski 1961, Tomczak 1963).

Information about Dobiegniewo Forests and Duninów Forests often appears in the documents (Nowak 1991). In one of the works on history of the Kowal district where Lake Gościąż is located, Nowak (1991) points out that "...track connections between important administration centres such as Dobrzyń and Włocławek led through the broad forested areas". The state of the forestation of Kowal Lands at the end of 18th century is shown on the map by von Gilly from 1802–1803 (see Goslar, Chapter 9.2.1). The northern part of this region had been covered by an extensive forest then.

The documents confirm the existence of several tracks leading through the investigated region. In the King's Zygmunt I document from 1519 the "Vias Dobrinensem et Vladislaviensem" were mentioned (Guldon 1968). On the basis of data from the 18th century Nowak (1991) suggests that "...Dobrzyń Track led from Telażna to Dobiegniewo, where a boat-ferrying through the Vistula River functioned". After Gasiorowski (1972) this track was used from the times of King Władysław Jagiełło (AD 1385-1434). There was a second track, called Vistula river-side track, leading through Łeg and Duninów, used too (Góralski 1962). These data indicate that the dispersed archaeological material recovered from this area (mainly single potsherds, Fig. 9.6) can be interpreted as remains of the short-time stays of the people using the tracks.

However, the Medieval pottery remains found near Lake Gościąż may represent settlements that existed at this area from 13th century (Fig. 9.6). In a document from 1228 an information exists about a village named Dąb (Nowak 1991). The documents of Siemowit, Prince of Dobrzyń from the transition of 13/14th century support this information. Wistka, and probably Dąb and Dobiegniewo, were mentioned in this document as villages connected with the Dobrzyń castellany (Tab. 9.2, Nowak 1991). It is assumed that the two nameless villages located on the left bank of the Vistula mentioned in the Teutonic Knights documents refer to Dąb and Dobiegniewo (Bieniak 1986). This information may suggest that the area north of Lake Gościąż was permanently settled during those centuries.

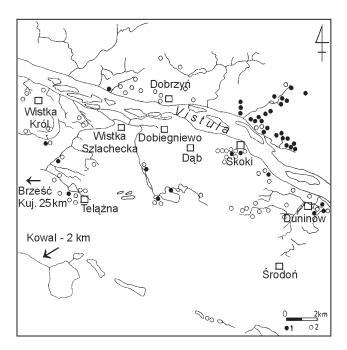


Fig. 9.6. The Medieval sites in the Lake Gościąż region. The present location of towns and villages  $(\Box)$  mentioned in the text is also indicated. 1- Medieval Period, 2- Modern Times.

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Table 9.2. Villages around Lake Gościąż in documents up to the end of the 15th century (after Nowak 1991).

Village	Date of first mention		
Dąb	1228		
Dobiegniewo	1454		
Duninów	1361		
Skoki	1462		
Środoń	1488		
Wistka Królewska	1300		
Wistka Szlachecka	1489		

About 1314, the Kowal castellany was separated from the Brześć castellany (Guldon & Powierski 1974). It is impossible, however, to reconstruct the size of this castellany and to decide whether it comprised the territory that later became the northern part of the Kowal district. Still it should be supposed that the change of administration of villages located along the Vistula River that earlier belonged to Dobrzyń castellany (probably Dąb and Dobiegniewo) took place in 1409, after the conquest of the Dobrzyń Land by the Teutonic Knights (Bieniak 1986). The village Duninów appears in the document of King Kazimierz the Great dated to 1361, evidencing that Duninów belonged to the Kowal Lands (Nowowiejski 1930).

Further economical activity on the area between Wistka and Duninów proceeded during the 15th century (Nowak 1991). The villages at Skoki and Wistka Szlachecka came into being then (Tab. 9.2). The first well documented information about Dobiegniewo should also be ascribed to this period but data on the earlier existence of Dobiegniewo are more speculative. The first lists of land properties from the Kowal Lands are contained in the "Register of Kowal Lands" from 1489 (Senkowski 1961), as well as in the "Register of the Sors" from 1494 (Posadzy & Kowalewicz 1957). But there are no data about Dab, Dobiegniewo, and Duninów in these documents (Tab. 9.3). It is known, for instance, that a village named Skoki, built around 1462, had already been abandoned in 1494 (Nowowiejski 1930).

**Table 9.3**. Villages around Lake Gościąż acc. to the Register from 1489 and the Survey from 1494 (after Nowak 1991).

Village	Used sors	Number of mills	
Dąb	lack of data		
Dobiegniewo	lack of data	1	
Duninów	lack of data	1	
Ruda			
Skoki	abandoned village		
Środoń	lack of data		
Wistka Królewska	2		
Wistka Szlachecka	2	1	

During the 13th-15th centuries villages had been located on the basis of Teutonic Law. The typical feature of those villages was the regular arrangement of fields. The agriculture organization system was based on rents. The land area utilized at Wistka Królewska and Wistka Szlachecka villages had been 2 sors (1 sor = ca. 16.8 ha) (Tab. 9.3). It is impossible, however, to evaluate the size of particular farms in these villages at the time of their location. Documents show that from the 15th century on a process of division of farms took place. According to Nowak (1991), in both Wistka Szlachecka and Wistka Królewska lived 6 farmers, and a total size of individual farm was no more than 2 sors.

In the second part of the 15th century the area between Wistka and Dobiegniewo had a considerable population density. Two new churches were built there at that time, one at Duninów built about 1470, and another one at Wistka Szlachecka about 1496 (Nowak 1991). The parish at Wistka Szlachecka originated from the end of 15th century. Three mills were in use at Dobiegniewo, Duninów, and Wistka Szlachecka then (Tab. 9.3); the mill at Dobiegniewo was built about 1455 (Tab. 9.4).

Table 9.4. Mills around Lake Gościąż (after Nowak 1991).

Village	Date of erection	Reference	
Dąb	1616	Lustracja 1616, p. 637	
Dobiegniewo	1455	Nowak 1991, p. 64	
Duninów	1489	Nowak 1991, p. 64	
Ruda	1556	Nowak 1991, p. 64	
Telążna	1607	Nowak 1991, p. 64	
Wistka Królewska	1539	Nowak 1991, p. 64	
Wistka Szlachecka	1489	Lustracja 1489, p. 118	

During the 16th-18th centuries the districts were the basic units of state administration. However, the rent execution was based upon the parish division. Most parts of the area in question belonged to the Włocławek Bishopric, except for the neighbourhood of Duninów, which belonged to the Płock Bishopric (Nowak 1991). The area between Wistka and Duninów had generally been royal land. A small part of the area between Dąb and Skoki belonged to the church, and the neighbourhood of Wistka Królewska had been a gentle land. Several new villages were built in the 16th century, for example Ruda and Nowa Wieś (Nowak 1991).

On the basis of documents from the end of the 15th and the beginning of 16th century it is difficult to reconstruct the size of villages and the population of Dab, Duninów, and Dobiegniewo. Comparison of information from the register of sors from 1489, the survey from 1494, and the registers of rents from 1557 and 1566 shows that the size of the occupied area had grown con-

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Table 9.5. Villages around Lake Gościąż (rent registers from 1557 and 1566, after Nowak 1991).

Village	Number of			
	sors	farmers	tenants	craftsmen
Dąb	6			
Dobiegniewo	1.5		1	
Duninów	17	12		2
Skoki	8			
Środoń	5.5	1		
Wistka Królewska	6	1	1	
Wistka Szlachecka	1			6

siderably and that the social differentiation of the inhabitants progressed (Tabs 9.3 and 9.5).

Totally two sors were prepared for settlement in both Wistka Szlachecka and Wistka Królewska at the time of their location (Tab. 9.3), but it is difficult to say how much of the land was actually used. In Wistka Królewska in the 17th century the rent was paid according to the area of 6 peasant sors (Tab. 9.5). In Wistka Szlachecka only one peasant sor was in use but 6 craftsmen paid rent (Tab. 9.5). In Dab 6 peasant sors were in use. The particular farms, however, were rather small. In 16th and 17th centuries farms in Dobiegniewo were no more than 0.25 sor in size each (Nowak 1991). Duninów was a relatively big village at this time; 17 peasant sors were used, and 2 craftsmen and 12 farmers paid rents there.

Beside farming, other forms of utilization of the natural environment took place. Beside the mills existing at Dobiegniewo, Duninów, and Wistka Szlachecka in 15th century, new mills were built in the 16th century at Ruda and Wistka Królewska. The brewery at Duninów started to function already in 16th century. According to 17th century documents the inhabitants of some mentioned villages were engaged in fishing (Nowak 1991). Fishpools were often connected with mills, where the millers took care of the fish. By the permission of King Zygmunt I from 1521, the inhabitants of Dobiegniewo and Dąb were involved in wild-forest bee keeping. There were also bee keepers at Wistka Królewska and Duninów. Cutting trees for timber is mentioned in documents from the 15th century (Nowak 1991). Logs were worked in water sawmills at Dobiegniewo and Duninów. In the 16th and 17th centuries the inhabitants of Duninów worked also as raftsmen floating wood. From the end of the 15th century a woollen cloth-shearing manufacture functioned at Dobiegniewo (Tomczak 1963).

Manufacturing of iron at Ruda is confirmed from the end of 16th century. Near ironworks 10 houses were built then (Guldon 1974). At the same time 2 blacksmiths, 4 coal merchants, 4 miners, and 2 smelting-furnace operators paid rents at Ruda.

The above data suggest high professional differentia-

tion of people living in the area between Wistka and Duninów during the 15th and 16th centuries. However, it is impossible to reconstruct the number of inhabitants of the villages near Lake Gościąż during that period. Information about rents and incomes from sawmills (Nowak 1991) implies that this region was intensively exploited economically.

In the 16th century the fishermen from Dobiegniewo paid a rent of 7 florens. Moreover, the inhabitants of villages situated along the Vistula River paid 4–8 bushels of hops (1 bushel = 36 litres). The cultivation of hops was probably connected with the brewery at Duninów. In 1564, the sawmill at Duninów gave a profit of about 60 florens.

The process of settling people in the region discussed continued in the 17th century, when the village Telażna came into being (Nowak 1991). All the previously mentioned villages were active at that time.

In the 17th and 18th centuries the royal stores of salt from Wieliczka existed at Dobiegniewo (Nowak 1991). In 1674, 55 people from Dąb paid rent. The brewery at Duninów worked throughout all that time, and some inhabitants of this village were engaged in fishing. The ironworks at Ruda were still functioning. Information is lacking about the sawmill at Dobiegniewo. Millers from Dobiegniewo and Wistka Królewska paid a conventional rent, and they were obliged to fatten hogs and do the carpenter services (Nowak 1991). Animal breeding in peasant farms then included cattle, horses, pigs, sheep, geese, and hens. In the Kowal district rye was the most commonly cultivated cereal. The population of Dobiegniewo parish in the 17th century is unknown, but in the Duninów parish 470 people lived at that time (Nowak 1991).

The distribution of archaeological sites confirms the above informations, and shows the general settlement patterns (Figs 9.1 and 9.6). In spite of the poor natural environment, which was not friendly to farming, the areas between Wistka and Duninów have been permanently inhabited during the Medieval Period and Modern Time.

## 9.1.3. HUMAN IMPACT ON THE VEGETATION OF THE LAKE GOŚCIĄŻ SURROUNDINGS IN PREHISTORIC AND EARLY-HISTORIC TIMES

Magdalena Ralska-Jasiewiczowa & Bas van Geel

The Na Jazach Lakes region is a rather special and interesting area for tracing the participation of past human populations in the transformations of the natural environment. As an area of rather poor soils unsuitable for intensive farming, it has never been radically deforested. On the other hand, it is situated quite close to important habitation centres active during different crucial periods of cultural history, e.g. the chernozem region of Kujavia