

THE SETTLEMENT PATTERN WITHIN THE MEDIEVAL LANDSCAPE NEAR KOSTELEČ NAD ČERNÝMI LESY (CENTRAL BOHEMIA)

Jan KLÁPŠTĚ – Zdeněk SMETÁNKA

1. The project of regional research on the medieval settlement of Bohemia

The study of the medieval settlement of Bohemia is conducted at three principal scales given by the extent of the area covered:

- a) at macrolevel - that means Bohemia as a whole is covered (i.e. some 52 thousand sq km).
- b) at mezzolevel - that means selected regions varying in size from tens to hundreds of sq km are studied.
- c) at microlevel - we are concerned with the study of individual settlement sites and their parts (see selected bibliography Klápště *et al.* 1994).

In the first instance we aim to outline the main trends in settlement evolution of Bohemia from the 6th to the late 13th and early 14th century, trace the progress of medieval colonisation within each geographical zone and provide the overall characteristics of the main landscape areas.

In the second case, while trying to reconstruct the process of medieval settlement, we focus on studying the relationships between individual settlement components. Particular attention is given to the phenomenon of High Medieval transformation, which in our part of Europe took place in the 13th century.

At the third level we are dealing with individual settlement sites, their constituent elements and their immediate surroundings or hinterlands.

At the mezzolevel research in selected regions has been carried out as an important part of Czech medieval archaeology since the 1970's. It has been orientated to respond in the first place to a given objective fact the great diversity of the Czech landscape, the considerable regional variability of physical features and therefore also the considerably diversified development of settlements. The mezzolevel scale of site surface survey and rescue activity also allows the current material source base to be continuously enhanced and become increasingly representative. At present, new data are available from several Bohemian regions where systematic study has been conducted over a number of years. The Prague Archaeological Institute has been responsible for those undertaken in the regions of Chrudim (Frolík - Sigl 1995), Čáslav (Charvát 1994), Kostelec n. Č. lesy (see further), Prague (Klápště - Smetánka - Dragoun 1983) and Most (Klápště 1994a).

This paper focuses on the Kostelec region which began to be systematically studied as early as in the 1970's, when a project was launched based on site surface survey covering a relatively small area of 60 sq km (Smetánka 1959; Klápště 1978). Alongside this, five best-preserved deserted medieval villages in the region were subjected to geodetical - topographical survey (Smetánka - Klápště 1981). This region is particularly rich in well-preserved medieval surface remains of excellent visibility. It should also be noted that archaeological excavations conducted at some of the sites have substantially contributed to the confirmation of data obtained through fieldwalking. Documentation of features bearing traces of recent human activities or other kind of events has also proved helpful (Smetánka - Klápště 1979).

From the present-day perspective we believe that thanks to both the new data from the Kostelec region and the possibility of making new comparisons within the whole area of the Czech Republic a more accurate attempt at characterising this particularly area can be achieved.

2. The note about physical environment of the Kostelec region and the situation prior to 13th century

Though situated in central Bohemia, a mere 20 km away from Prague, the Kostelec region has up to this day retained the position of a marginal area wedged between the Prague area, the area along the Elbe river and the Kouřim region. What makes it so strikingly different from the surrounding regions are the physical features of the landscape. While the above mentioned neighbouring lands do not exceed 300 m a.s.l., the heart of the Kostelec region rises higher than 400 m a.s.l. The bedrock is mostly of cold granite or other not convenient rocks which is covered by a thin layer of acid soils (*Klápště 1978*, fig. 1). The vegetation reconstruction map indicates a high proportion of acidic oak woodland (*Klápště 1978*, fig. 2). Adding to the picture of the physical conditions are the taxation records from the late 18th century, where grain yields clearly indicate that Kostelec region was among the lowest grain producing areas showing outputs only 2.5 to 3 times higher than was the amount of seed sown. Sites located only a short distance away produced sometimes as much as a 100 % higher yields (*Fig. 1*).

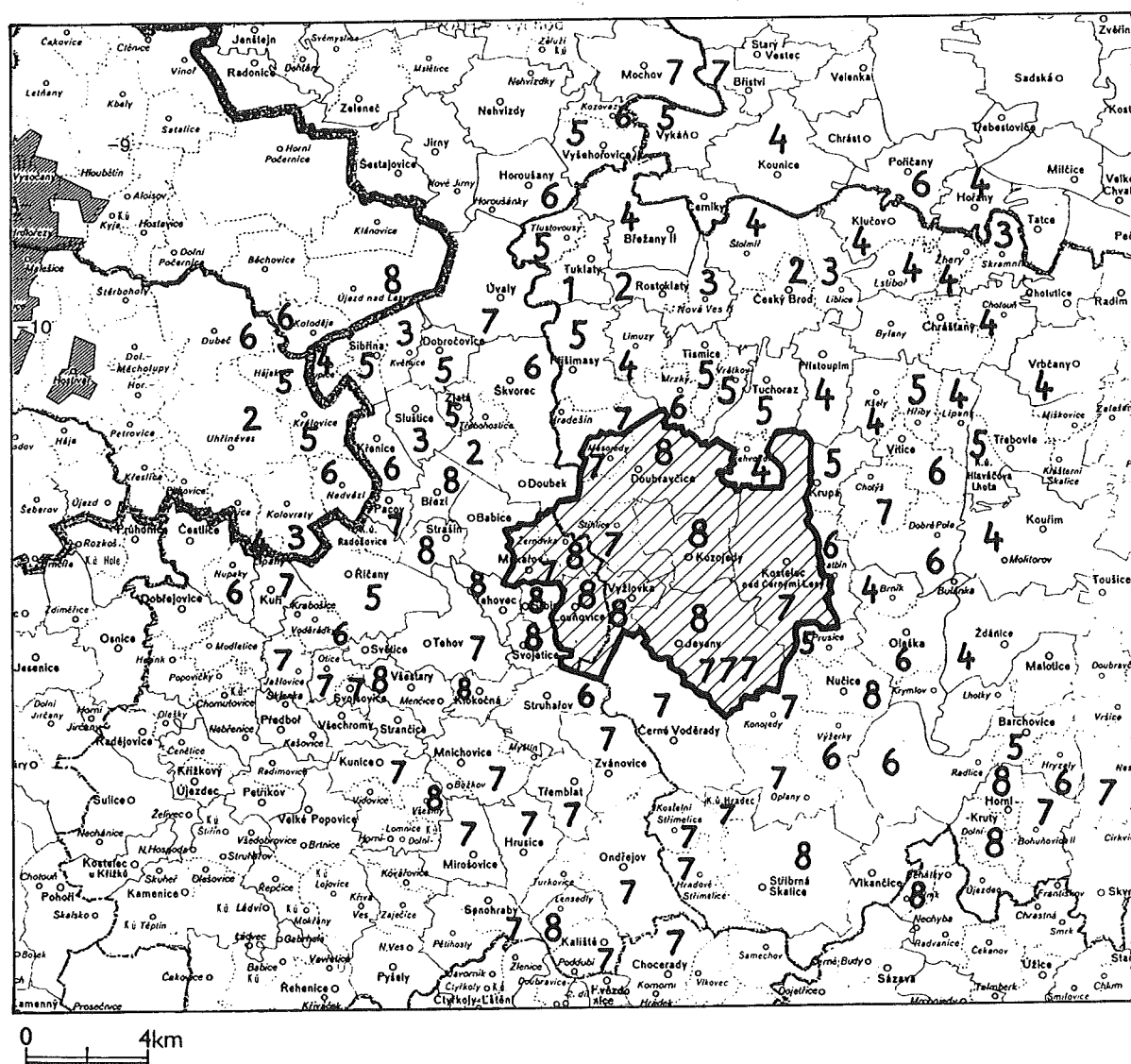


Fig. 1. The Kostelec-nad-Černými-lesy region - marked with bold line in the centre of the picture. In NW corner the limits of Greater Prague area. Numbers indicate soil quality categories based on Land survey record of 2nd half of the 18th century. 8 = 2.5 times larger grain yields, 1 = 6 times larger grain yields.

Characterising the Kostelec region as unsuitable for farming though surrounded by agriculturally more suitable areas is going to raise the question about its place in the process of the general settlement evolution of Bohemia. We assume that from prehistory until the early medieval period the Kostelec region had been exploited for habitation only sporadically and if so, the occupation was both isolated and intermittent. The earliest isolated evidence dates from as early as the neolithic, but it was not until the early Middle Ages that this region seems to have seen an attempt at occupation. In the 8th century one of the oldest yet known early medieval hillforts in Bohemia had emerged inside this region (*Profantová 1998 forthcoming*). Even this location, however, seems to have been but an isolated outpost situated off the main settlement areas. As a matter of fact, this situation corresponds with a pattern typical of the earliest medieval hillforts of Bohemia. Also in the later phase of the early medieval period, from the 9th to 12th centuries, the exploitation of the Kostelec region for habitation seems to have been only marginal, i.e. restricted to a minimum.

3. The settlement of the Kostelec region by colonisation

A critical change in the settlement of the Kostelec region seems to have taken place in the first half of the 13th century. The upsurge of colonisation resulted in deforestation of a sizeable area of land and the setting up of a network of villages, thus creating a basis for further and continuous development of settlement in the region.

There is no way we can rely on written sources for clues to help us the beginning of the colonisation here, as written evidence becomes helpful in this respect only from the mid 14th century onward, when the need had emerged to register transfers of landed property.

When studying the roots of medieval settlement in the Kostelec region, we are thus fully confined to material evidence. The standing medieval remains are represented only by a single church, the church of St. Martin at the village of Kozojedy. The oldest part of this simple building has been classified as late Romanesque, dating from the first half of the 13th century. Archaeological evidence has been recorded from both settlement sites and churchyard burials. Evidence of the former type involves fairly large assemblages from several sites, the latter consists of ornamental accessories recovered from two churchyards. This fairly representative collection of data corroborates the initially suggested conclusion that the relatively continuous settlement of substantial areas of the Kostelec region took place in the first half of the 13th century.

Any discussion about the forces behind this rise in the settlement activity has again to do without the help of direct written evidence. As relatively later documentary sources suggest, the church as an institution can be excluded from these colonisation efforts. Regional situation leaves the space for the royal power as the potential agent but local gentry also participated in the progress, as is suggested by the general hierarchy of power existing before the mid 14th century as well as by the remains of several smaller fortified residences located in the region. The royal castle at Kostelec nad Černými lesy was at the top of the regional hierarchy, with several seats of landed gentry dependent on it and situated in surrounding villages.

The position of this region during the period of medieval urbanisation process is also characteristic. Not a single urban centre had existed there until the end of the 15th century. This could suggest that the general economic and trading potential of the region was rather low. The accessibility of the nearest market town was sufficient. From the 13th to 15th century the economy of the Kostelec region was therefore probably divided among three nearby towns, namely Říčany, Český Brod and Kouřim (*Fig. 2*).

If we assume that the colonisation of the Kostelec region took place in the first half of the 13th century, it will coincide with the emergence, in some parts of Bohemia, of a new type of villages. Substantially different from the early medieval village, the new type was more regular in plan and this made it more adaptable to subsequent developments in settlement and economic evolution. The Kostelec region displays less regular examples of the new villages. Although these were founded at the time when new villages were emerging elsewhere in Bohemia, here they were built in an "old" fashion. Colonisation had resulted here in a fairly dense network of settlements only about a kilometer apart. Settlements tended to be located around spring basins, i.e. close to water supplies. The number of homesteads in a settlement was relatively low: our reconstruction contains from 5 to 9 homesteads. The lay-out of the settlement site was given by the geomorphology of the terrain and followed its irregularities, resulting largely in irregular clusters.

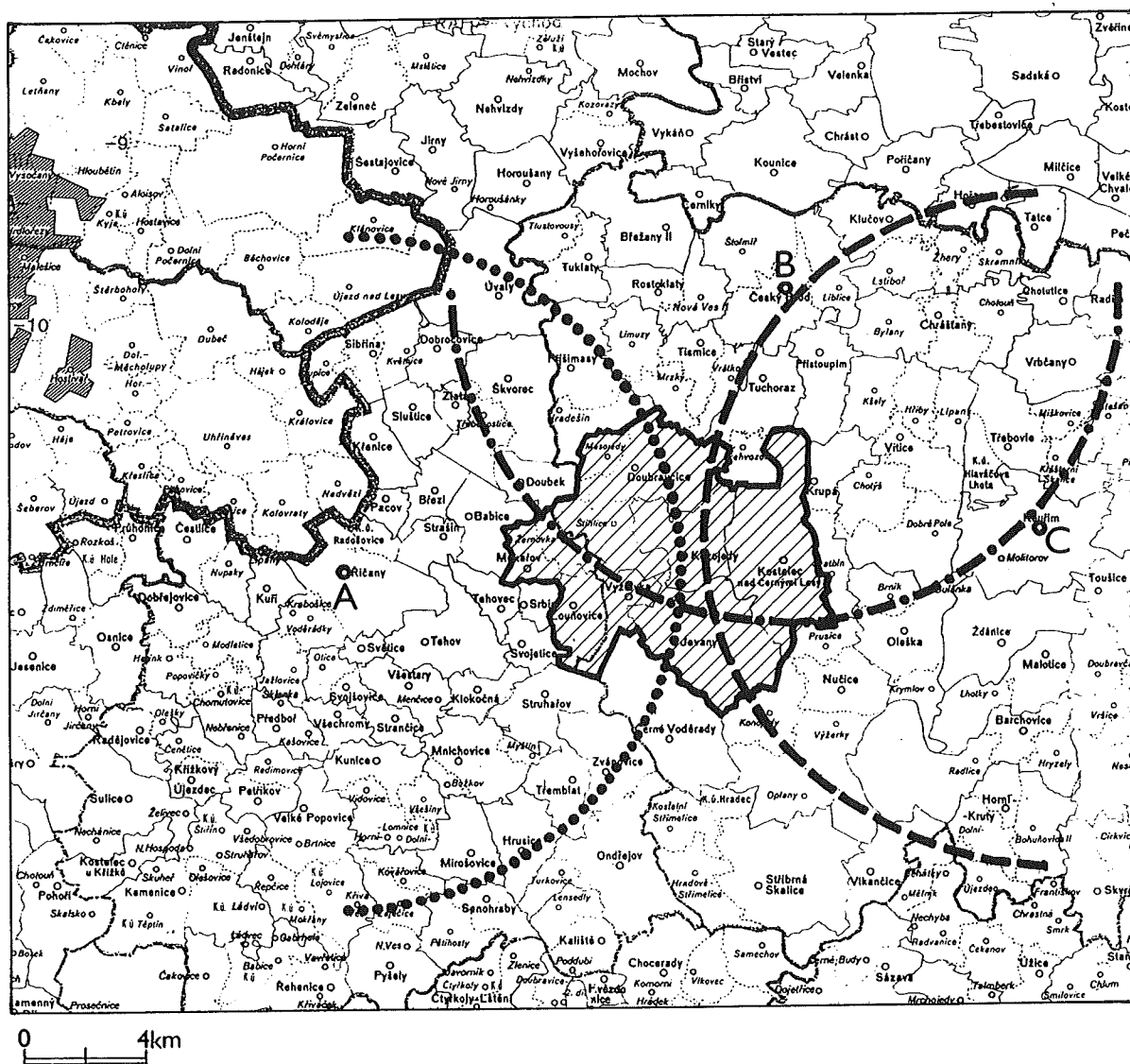


Fig. 2. The Kostelec-nad-Černými-lesy region - relations to market regions around the surrounding towns. A = Říčany, B = Český Brod, C = Kouřim; $r = 11$ km. Model based on the rules of municipal law.

The above aspects make the relative late colonisation of the Kostelec region comparable to the previous early medieval situation in other parts of Czech land. But in many aspects it was not a mere continuation of it. The use of stone for building had become characteristic of the Kostelec region, although it dates back as early as the 13th century, while in the rest of Bohemia houses made of stones were rare. The slightly weathered granite bedrock close below the surface offered an easily available building material which could be used for the foundations of walls made of wood and clay, as well as for the entire walls joined by clay. Obscure remains the length of the period within which the intricate plans of these homesteads had evolved and how this was happening; their remains have been recorded in some of the villages of the Kostelec region that were deserted in the 14th century.

The more or less steady development of the colonisation settlement of the Kostelec region did not take long. Between the end of the 13th and the beginning of the 15th centuries the region experienced two waves of desertion and depopulation which had greatly affected the settlement distribution. Some of the settlements turned into woodland again, along with their hinterland areas, others had given rise to a completely new village type, larger in size and laid out now around the central common village green. In comparison to other parts of Bohemia, the "new villages" in this region are one or two generations belated.

Deforestation was performed to provide for adequate hinterland, and new allocation of fields and house plots took place. It was thanks to these new shifts in the village lay-out that the well preserved archaeological

evidence has survived newly created woods and can today help shed some light on the medieval landscape of the Kostelec region.

4. Characteristics of the colonisation village of the Kostelec region

The relics of the Kostelec medieval landscape include a variety of components: villages consisting of clusters of homesteads, motte and baileys, manorial farms, water mills, residues of fields, ponds, quarries, fragments of roads. Site surface survey is the principal method of investigation. Whereas the present-day fields have not retained relief traces, yielding only scatters of fairly large ceramic assemblages, woodland areas have been able to preserve a wealth of small anthropogenic features outlined in relief. Study of the settlement sites containing these remains is based on geodetical - topographical survey, which has produced very precise maps. To exemplify the source potential of these areas, let us present three cases of deserted medieval villages from the Kostelec region.

No. 1 - Vyžlovka

This is a name we have given to the largest of the deserted medieval villages in the region (*Fig. 3; Smetánka - Klápště 1981, 431 seq.*). Located around the edge of a basin with a spring, the site has yielded over 40 features which were traced in relief by surface survey. Links between them have been established by geodetical - topographical analysis. The reconstruction of the communications network has also proved to be of great help. The village seems to have been made up of about 8 homesteads, all of them consisting of different parts which could be distinguished structurally and were probably intended to serve different purposes. A system of two ponds was built inside the spring basin, on one of the dams there was a water-mill (*Klápště 1994b, fig. 3*). The rest of the surviving remains include residues of a manorial farm, fragments of fields and route-ways running to neighbouring villages. Dating is fully dependent on archaeological chronology, the beginnings of the village are datable to the first half of the 13th century, its desertion to the second half of the 14th century. We have been unable to glean any written reference relating to the site or a place-name that could be attached to it.

No. 2 - Jevany

Sited near a water-spring on a flat terrain, this is one of the smallest settlements of the medieval Kostelec region (*Fig. 4; Klápště 1978*). Around 10 features have been traced in relief by surface survey and these include remains of 6 structures and a low earthwork enclosing the site. They suggest a degree of functional interrelationships, possibly within one manorial farm. Dating is fully dependent on archaeological chronology with the beginnings datable to the first half of the 13th century and desertion in the 14th century. Documentary sources have again failed to provide reference relating to the site or a place name attachable to it.

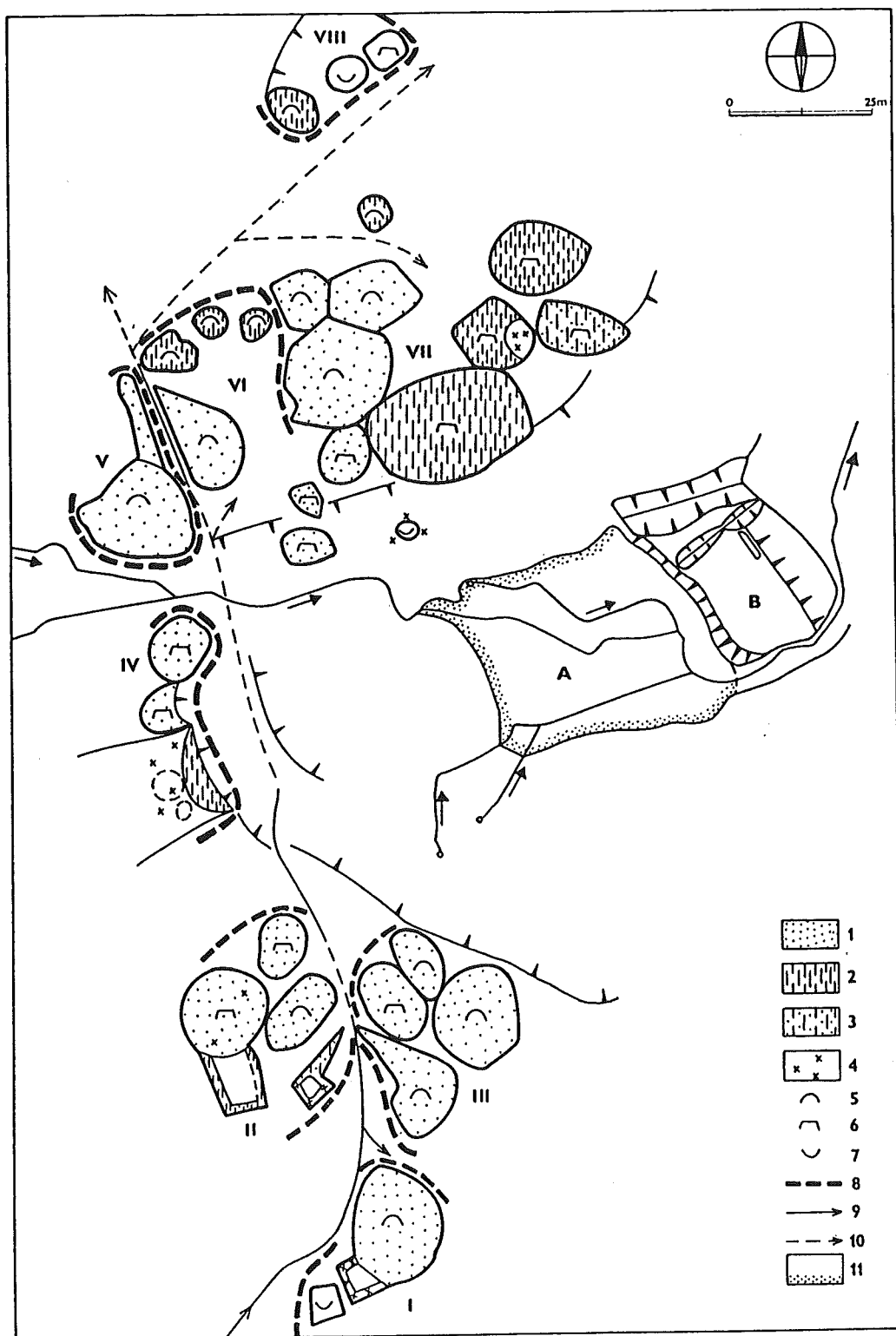


Fig. 3. + "Vyžlovka". Sketch of the situation. A - reconstructed area of fishpond; B - dam with mill remains. 1 - objects consisting of decomposed granite; 2 - objects consisting of clay; 3 - objects consisting of a mixture of decomposed stone and clay; 4 - stones; 5 - higher convex feature; 6 - low convex feature; 7 - concave feature; 8 - interpretation of homestead boundaries; 9 - road directions observed in the ground; 10 - suggested direction of communications; 11 - probable water level.

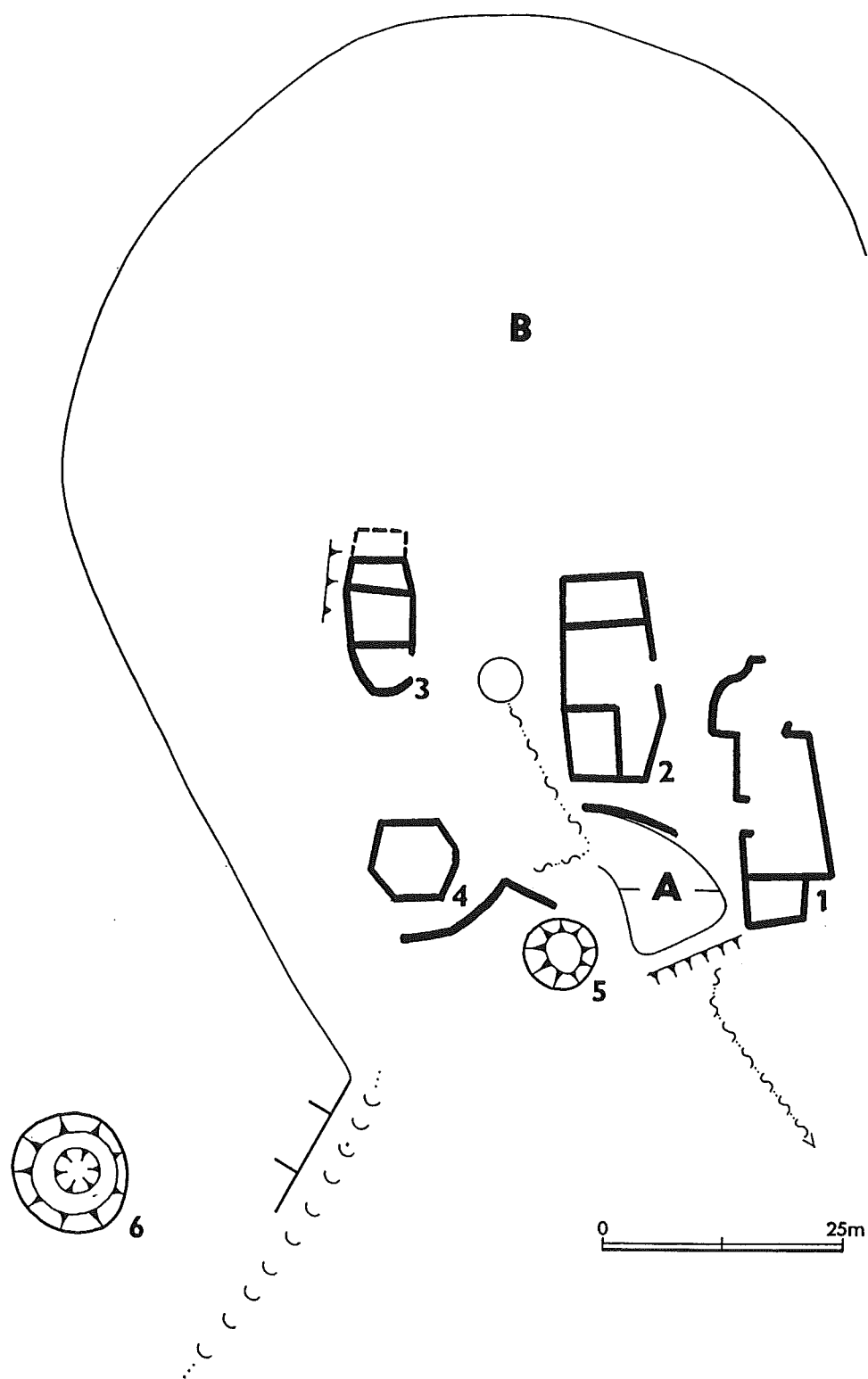


Fig. 4. + "Jevany" - Sketch of the situation of deserted settlement. 1-6 visible relics of destructed buildings. A = small pond; B = moated area.

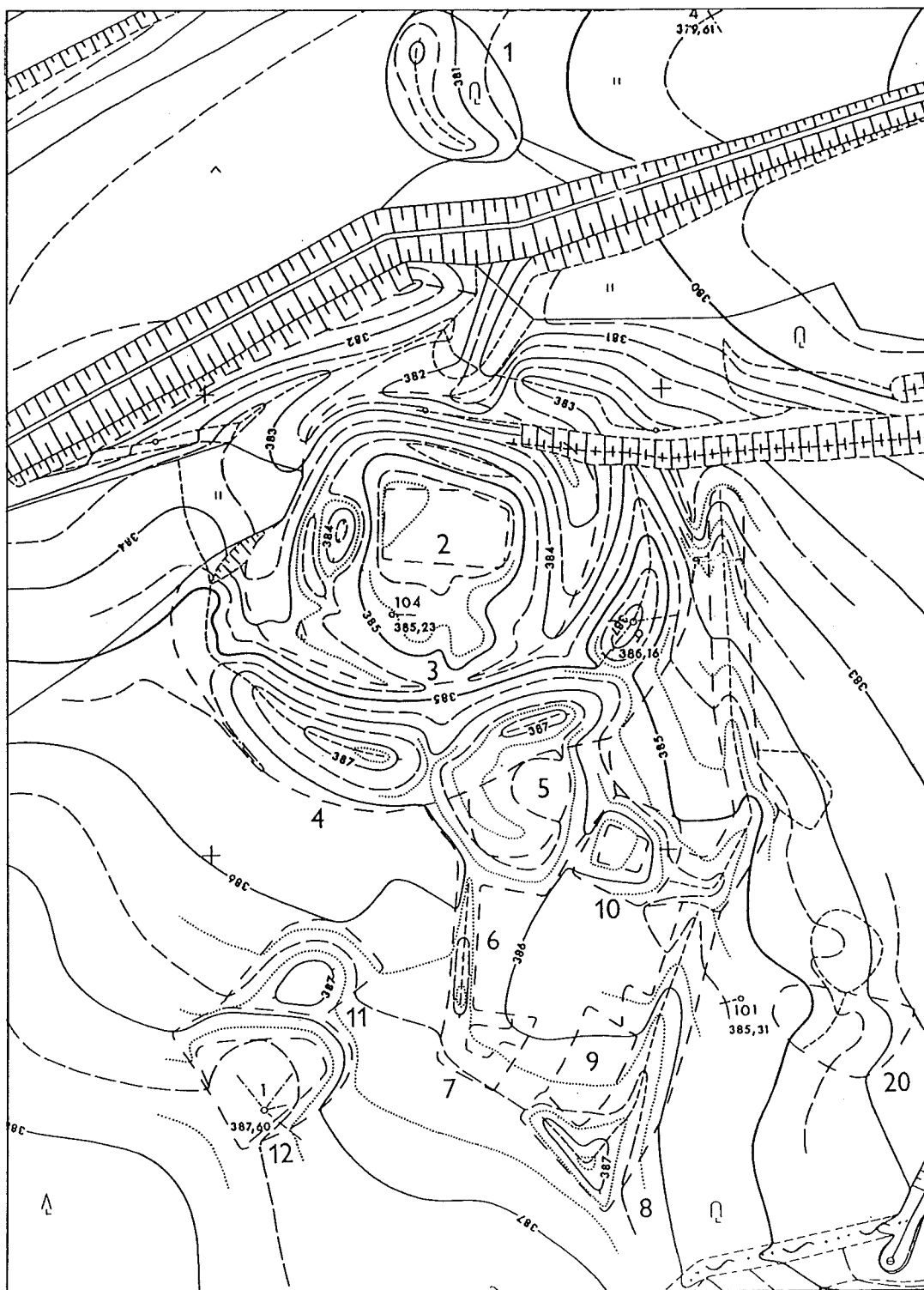


Fig. 6. Section of the map of "Lažany". Original measurement = geodetical-topographical research. 1 - dam of the pond; 2, 3, 4 - motte; 5-10 - relics of bailey; 11, 12, 20 - relics of homesteads.

Another village located around the edge of a spring basin which has provided some 30 features distinguishes in relief by surface survey (Fig. 5; Smetánka - Klápště 1981, 423 seq.) Considering the topography of the site and the communications network, we envisage that 5 homesteads made up the village. It also included a motte and bailey with a pond attached to it (Fig. 6). At the opposite end we presume the existence of a manorial farm with a wall enclosing at least some parts of it. A quarry was located at the junction of routeways running out of the village and, as the communications links suggest, it most probably served the medieval settlement. The beginnings of this village fall to the early 13th century. Written records refer on one occasion to *curie Laschane dicte Nove curie*, on another to *villa Lazani*. The desertion is datable to the late 14th century. The name Nove curie might suggest that the enclosed manorial farm was a later addition to the village. This raises a question concerning the changes that the colonisation villages of the Kostelec region underwent during the 13th and 14th centuries.

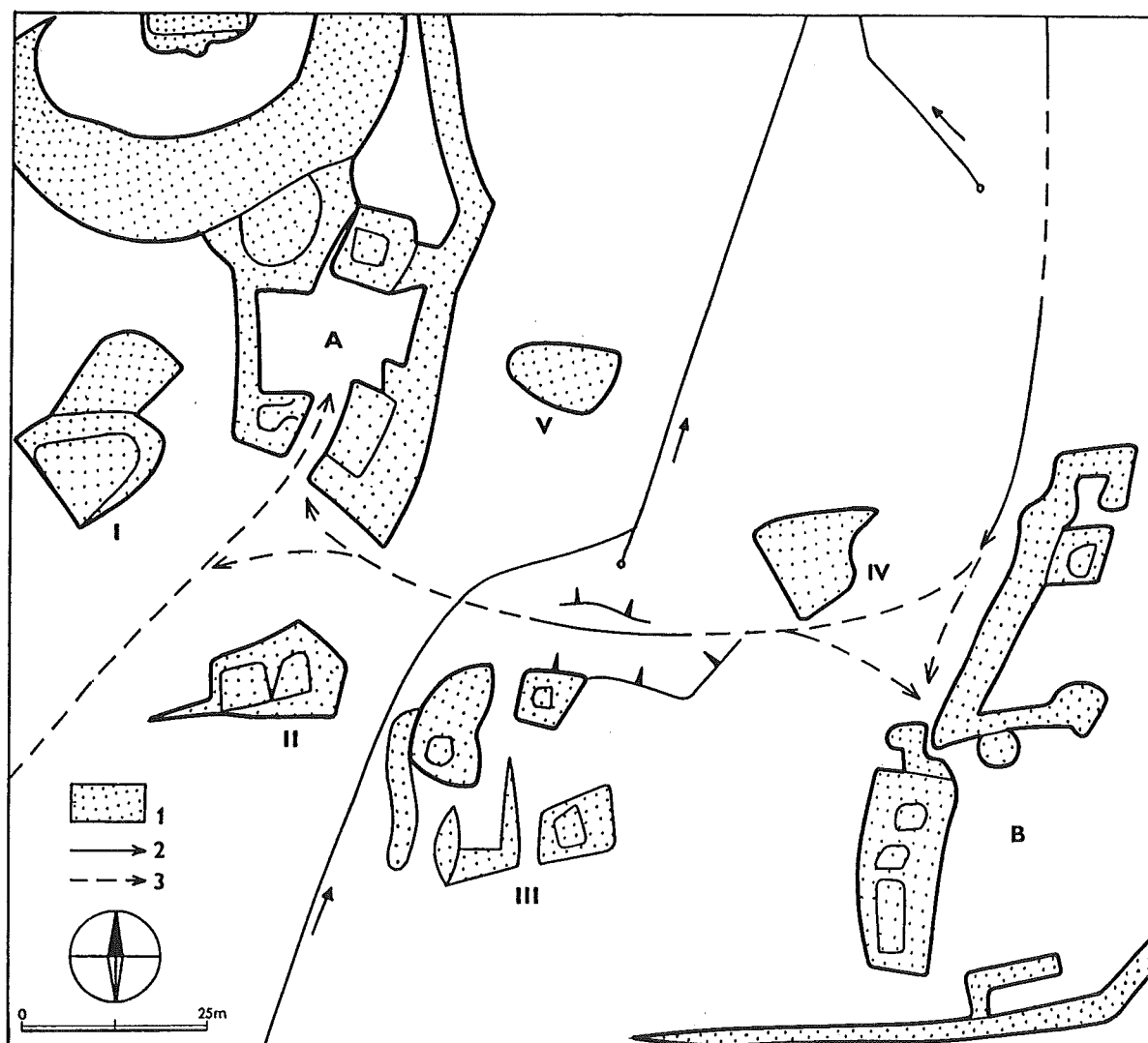


Fig. 5. + "Lažany". Sketch of the situation. A - castle manorial farm; B - later manorial farm; 1 - objects consisting of decomposed stone; 2 - road directions, observed in the ground; 3 - suggested direction of communications.

5. Structural changes in the colonisation settlement of the Kostelec region

As indicated above, the characteristics of the colonisation settlement in this region show a considerable degree of continuity and formal links with the preceding early medieval settlement pattern. The sites we have selected here for illustration provide a picture of a situation which is far from being stable. The setting up of manorial farms is a reflection of efforts at improving the economy. They could not, however, prevent the colonisation settlement in the region from getting into crisis. Under the increasing economic pressures of the 14th and 15th centuries the contrast between this region and the more productive adjacent areas must have become acute. Deeper structural changes in the colonisation settlement pattern had become inevitable. The following example provides an idea of how dramatic the impact of these changes may have been.

The cadastre of the village of Kozojedy covers three settlements of the early colonisation phase datable therefore to the first half of the 13th century (Fig. 7). By the end of the century and in the 14th century all of the three sites had been abandoned. One of the sites along with its hinterland turned back into woodland while other vast areas of land had been newly deforested. In the course of these structural changes a settlement located close to the church of St. Martin had disappeared and the church remained standing as an isolated building amid the fields. The church was founded in the early 13th century and presented one of the stable spots within the colonised region. A new village began to nucleate on a newly selected site. The lonely church building, separated from the village, has remained part of the local church administration up to this day. The reorganized settlements pattern of the region had affected not only the landscape but also social relations. This is a good example of the nucleation process.

The thirteenth century in Bohemia represents a transitional period during which the settlement pattern of the early medieval type was altered to accommodate new economic and social situations. In this respect the examples from the Kostelec region have taught us not to accept simple conclusions, as the relationship between the old and the new developments in the living culture always proves to be more variable and complex. The complications involved in the settlement development of this particular region do not closely reflect the general historical trends of that period. The well-preserved remains surviving in the forests of the Kostelec region have provided a most concrete picture of a small part of the Czech landscape during the 13th and 14th centuries, different from usual development known in other parts of Bohemia.

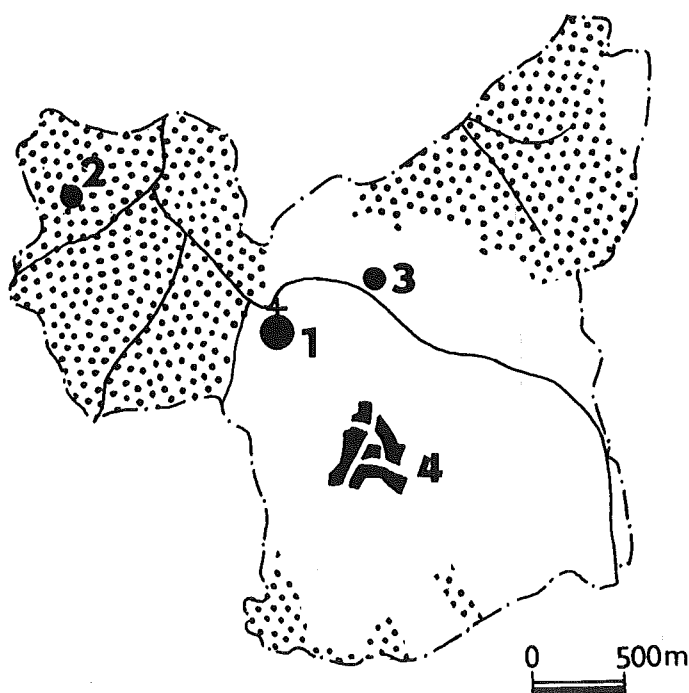


Fig. 7. Kozojedy - a cadastral area near Kostelec-nad-Černými-lesy. 1 - village with the late romanesque church, central village of the early colonisation period; 2-3 - adjacent hamlets; 4 - nucleated village of the later colonisation period.

SIEDLUNGSSTRUKTUR DER MITTELALTERLICHEN LANDSCHAFT IM GEBIET VON KOSTELEČ NAD ČERNÝMI LEŠY

Im Einleitungsteil des Beitrags wird die regionale Erforschung der mittelalterlichen Besiedlung Böhmens in kurzer Fassung charakterisiert (drei qualitative Ebenen der Regionalstudien). Als ein Beispiel der mittleren Ebene wählen die Autoren das Gebiet von Kostelec nad Černými lesy (Mittelböhmen, 60 km²). Dieses Gebiet wurde erst in der ersten Hälfte des 13. Jh. kolonisiert, und zwar in einer Weise, die in einigen grundlegenden Aspekten aus der frühmittelalterlichen Tradition hervorging. Zwischen dem Ende 13. und dem 15. Jh. verlief dort eine Welle der Verwüstung, die mit einer Transformation der Siedlungsstruktur (verspätete Entstehung "neuer Dörfer") verknüpft war. Ausser einer neuen Entwaldung kam es damals zugleich zur Bewaldung der landwirtschaftlich ungenutzten Flächen. In diese noch-malige Bewaldung sind auch Areale einiger ehemaligen Dörfer einbezogen worden. Deshalb konnten sich die oberirdischen Relikte der Wüstungen in der Region von Kostelec nad Černými lesy sehr gut erhalten. Die folgende ausführlichere Darstellung konzentriert sich auf 4 Lokalitäten, die regionalen Entwicklungstendenzen am besten illustrieren.

STRUCTURE D'HABITAT DANS LA RÉGION DE KOSTELEČ-NAD-ČERNÝMI-LEŠY

La partie préliminaire de notre contribution caractérise brièvement la recherche régionale de l'habitat rural du Moyen Age en Bohême (trois niveaux principaux des études régionales). En tant d'exemple du niveau moyen les auteurs choisissent la région de Kostelec-nad-Černými-lesy (Bohême centrale, 60 km²). La région n'était colonisée qu'au cours de la première moitié du 13^e siècle, à savoir d'une manière sortant dans quelques aspects essentiels d'une tradition du haut Moyen Age. Entre la fin du 13^e et du 15^e siècle une vague de désertion accompagnée par la transformation de la structure d'habitat (la naissance de "nouveaux villages") se passait. A côté de la nouvelle déforestation une reforestation des terroirs agricolement inexploitable se passait en même temps. Cette reforestation engloba également des aires de quelques villages précédents. C'est pourquoi dans la région de Kostelec-nad-Černými-lesy les vestiges situés au-dessus du sol des exploitations disparues pouvaient être très bien conservés. La présentation plus détaillée se concentre sur 4 sites illustrants le mieux les tendances évolutives régionales.

References

- Charvát, P. 1994: On Slavs, silk and the early state: The town of Čáslav in the pristine Middle Ages — O Slované, hedvábí a počátcích státu: Čáslav v raném středověku, *Památky archeologické* 85, 108-153.
- Frolík, J. - Šigl, J. 1995: Development of early medieval settlement and related structural changes within the Chrudim region: a research contribution — Příspěvek k vývoji osídlení a jeho strukturálním změnám na Chrudimsku, *Památky archeologické* 86, 63-104.
- Klápště, J. 1978: Středověké osídlení Černokostelecka — Die mittelalterliche Besiedlung im Raum von Kostelec nad Černými lesy, *Památky archeologické* 69, 423-475.
- 1994a: Paměť krajiny středověkého Mostecka — Memory recorded within the landscape of the medieval Most region. Most.
- 1994b: Změna - středověká transformace a její předpoklady — Transformation - la transformation médiévale et ses conditions préalables, *Mediaevalia archaeologica Bohemica* 1993, *Památky archeologické - Supplementum* 2, 9-59.
- Klápště, J. - Boháčová, I. - Drašnarová, M. - Ježek, M. - Vochozková, I. 1994: Medieval archaeology 1969-1993, Selected bibliography of the work prepared within the research programme of the Institute of Archaeology, Prague. In: 25 Years of Archaeological Research in Bohemia, *Památky archeologické - Supplementum* 1, 111-132.
- Klápště, J. - Smetánka, Z. - Dragoun, Z. 1983: Příspěvek ke studiu zemědělského zázemí středověké Prahy — A contribution to the study of rural hinterland of the mediaeval city of Prague, *Archeologické rozhledy* 35, 387-426.
- Profantová, N. forthcoming 1998: Doubravčice. Zu den Anfängen der frühmittelalterlichen Burgwallanlage aufgrund der Ausgrabungen von J. Kudrnáček, *Památky archeologické*.
- Smetánka, Z. 1959: Středověká osada mezi Štíhlými a Kozojedy — Mittelalterliche Ansiedlung bei Kozojedy, *Archeologické rozhledy* 11, 683-691.
- Smetánka, Z. - Klápště, J. 1979: Geodeticko-topografický průzkum zaniklých středověkých osad — Geodetisch-topographische Untersuchung mittelalterlicher Wüstungen, *Archeologické rozhledy* 31, 614-639.
- 1981: Geodeticko-topografický průzkum zaniklých středověkých vsí na Černokostelecku — Geodetical-topographical survey of deserted mediaeval villages in the Kostelec-nad-Černými-lesy region, *Památky archeologické* 72, 416-458.