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Slovenia

Dolga njiva. Stone foundations of a building, 4th–5th centuries. Photo F. Stele.

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Summary

Jana Horvat

Inhabiting the high mountains of the south-eastern Alps

The Alps terminate in Slovenia in three mountain ranges: the Julian Alps, the Kamnik-Savinja Alps and the Karavanke (Karawanken in German). Their geology is dominated by carbonate, the Karavanke also by silicate rocks. Each range is a combination of sharp peaks, deep valleys and alpine karst plateaus. The highest peaks are Triglav (2864 m asl) in the Julian Alps and Grintovec (2558 m asl) in the Kamnik-Savinja Alps. The tree line at present reaches to around 1800 m asl in the Julian Alps and the Karavanke, and to roughly 1600 m asl in the Kamnik-Savinja Alps. Above it, grassland sharply rises into steep terrain with little or no vegetation. The Kamnik-Savinja Alps and the Karavanke are flanked by large basins, that of Gorenjska in the south and of Koroška/Kärnten in the north; both ranges are relatively easily accessible from the lowland and major traffic routes. In contrast, the larger Julian Alps are more remote. The highest permanent habitation at present is in the eastern part of the Karavanke, where it reaches up to 1325 m asl.[1]

The three ranges are the subject of ongoing archaeological investigations that began in 1996. The investigations comprise topographic surveys and small-scale fieldwork above the present-day line of permanent habitation. It is a joint effort of several institutions (ZRC SAZU - Inštitut za arheologijo, Gorenjski muzej Kranj, Medobčinski muzej Kamnik, Tolminski muzej) and external collaborators,[2] operating throughout with very limited financial resources.

The investigations are primarily focused on identifying archaeological sites in a high mountainous landscape, where the altitude suggests a seasonal human presence. These sites span from the Eneolithic to the beginning of the High Middle Ages. The first step in the investigation is the identification of a site. This is usually done on the basis of a suitable location and remains on the surface. Identification is followed by test pitting, with pits measuring around 50 x 50 cm, and aimed at gaining a better insight into the nature of the site. Only rare sites have been investigated further, by digging larger trial trenches, while no site has been the subject of a large-scale project.[3]

In the course of the two decades of work, investigations have yielded data on roughly 80 sites. These may hypothetically be associated with different uses, such as hunting, pasturing, mining, cult practices, traversing mountain passes. Having said that, it has usually been a challenge to understand the functions of sites given the scarcity of finds and findings. The number of sites does reveal certain characteristics and rules of development, which led us to classify sites according to uniform criteria.

The places of prolonged habitation share a number of common characteristics. They are often located on the lower or central parts of larger geographical units such as valleys, basins or plateaus with extensive grassland, as well as in areas rich in iron ore. Proximity to water sources is frequent, but not prerequisite. The remains of human habitations have been documented on areas of flat terrain raised slightly above the surroundings, exposed to the sun, but sheltered from the winds, torrential streams, landslides and avalanches. Several sites revealed repeated habitation in different periods, which suggests that the environmental factors played the key role in the choice of location.[4] For the purposes of the present investigation, only the altitude of sites was chosen to be analysed in more detail.

Working under the premise that the size of a site, the alterations to the terrain, as well as the type and quantity of small finds indirectly reflect site function, we determined the following types

[1] Perko, Orožen Adamič 2001.

[2] I sincerely thank Janez Bizjak, Miran Bremšak, Tone Cevc, Pavel Jamnik, Gorazd Kutin and France Stele for their dedicated participation.

[3] Cevc 1997; Cevc 2006a; Horvat 1999a; Horvat 1999b; Horvat 2002; Horvat 2006; Horvat 2010; Horvat 2013; Ogrin 2006; Ogrin 2010; Pleterski 2006; Pleterski 2010.

[4] Bremšak 2006; Horvat 2006, 27.

of sites: simple dwellings, buildings, short-term habitations and findspots of isolated finds.

A simple dwelling covers a 3 x 3 m or larger area of possibly levelled terrain without visible stone structures. Its substantial cultural deposit contains bits of charcoal and artefacts in varying concentrations. The small finds mainly comprise sherds of different vessels, but also animal bones and the odd stone tool and metal artefact. Lost, discarded or intentionally deposited objects have sometimes been unearthed in the vicinity. These remains are evidence of a prolonged human presence (Fig. 1).

The second site type covers a similarly large area (3 x 3 m or more) with remains of stone foundations, pavings and, in some cases, also a hearth, which are clearly the remains of a building. The cultural deposit covers the area of and at the building, but also refuse areas and pits, as well as individual artefacts in its vicinity (Fig. 2). Only few sites revealed groups of buildings, presumed to be more or less contemporaneous (Fig. 14).

Some sites yielded archaeological traces limited to small areas, less that 2 x 2 m large and sometimes levelled. The cultural deposit here is thin and contains very little bits of charcoal and pottery, possibly even the sherds of a single vessel. Some of these areas included a fireplace or pit with cultural remains. This suggests short-term habitation in spots that served as occasional shelters or resting places, though they may be the remains of other, unidentified activities (Fig. 3).

The last site type is the findspot of an isolated find without traces of an associated cultural deposit.

None of the sites have revealed the remains of stone enclosures that would predate the post-medieval period.

A further distinction between sites is their chronological attribution. The small test pits yielded artefacts that could frequently not be reliably dated because of their scarcity and undiagnostic nature. For pottery sherds, it is possible to broadly distinguish between those from prehistory, the Roman period, Late Antiquity and the Early Middle Ages. Part of the metal finds proved more diagnostic. Also helpful in dating is the radiocarbon dates of the charcoal taken from the deposits with archaeological finds. However, there were some unexpected disparities between the archaeological and radiocarbon dates. The charcoal from four sites in the Julian Alps has been attributed to prehistory, while the pottery finds from the associated deposits point to the Roman period or Late Antiquity (Table 1: 12–15). It should be said that the cultural deposits that yielded the sampled charcoal were thin and close to the surface, hence the charcoal may be a natural deposit rather than the result of human intervention; it is also possible that the deposits contained remains from different periods or the test pits were insufficiently large to reveal different habitation phases. The better investigated sites show that finds from different periods in the same deposit are sooner a rule than an exception.

The text below examines the sites with regards to the relationship between altitude, dating and site type (Tables 1–4). Because of the geographic separation and regional differences, we shall analyse the sites from the Julian Alps separate from those in the Kamnik-Savinja Alps and the Karavanke (Figs. 4, 11).

Prehistory

Tables 1 and 2 provide key information for determining and comparing the prehistoric sites in the Julian Alps, as well as the Kamnik-Savinja Alps and the Karavanke: altitude, site type (simple dwelling, building, short-term habitation, isolated object), charcoal dating and type of small finds and their chronological attribution. Prevailing among the small finds is pottery, but most of it cannot be determined with any precision. For this reason, the only chronological point of reference for many sites was the dating of the charcoal from the associated deposit, in spite of the misgivings this entails.[5] The tables

[5] Not all the charcoal samples taken from different sites

give the charcoal dates next to the artefacts and thereby their correspondence or lack thereof.

Several sites with pottery only broadly attributable to prehistory yielded charcoal dated to the end of the 4th or the first half of the 3rd millennium BC (Table 1: 1, 2, 4; Table 2: 22, 23). These dates are not adequately supported by archaeological evidence, hence their usefulness in dating the associated deposit and consequently human habitation is questionable. However, their numbers do allow us to seriously consider the possibility of human presence in the alpine zone already towards the end of the 4th millennium BC. These sites revealed no traces of terrain alterations or stone foundations, but the substantial cultural deposit at Mali Lepoč does reveal intense habitation at the spot.

Numerous sites belong to the Middle and Late Bronze Ages, i.e. the second half of the 2nd millennium to the 9th century BC. Most can more precisely be dated to the Early Urnfield period (BA D and Ha A), between the 13th and the 11th century BC (Table 1: 3, 5–14; Table 2: 24–34). The remains of dwellings were documented on slightly levelled and naturally raised ground, mostly without traces of stone foundations (Fig. 5).[6] The cultural deposits revealed many pottery sherds and charcoal, stone tools were also frequent, while animal bones were rare and bronze artefacts an exception (Table 2: 32–33). Standing apart in the number of finds and size of the site is Pečice on the Velika Planina plateau, where an extensive habitation area is posited (Table 2: 25; Fig. 6). The scarce remains at some other sites indicate short-term stays (Table 1: 3, 6; Fig. 3).

Evidence of human presence in the Late Bronze Age also comes in the shape of isolated objects such as spearheads, axes, daggers and pins (Table 1: 8–11; Table 2: 26–31, 34). The archaeological contexts for the artefacts recovered some time ago are unknown, but we do have data on recent discoveries. At Spodnja Blejska konta, for example, a spearhead was intentionally hidden between large rocks, far away from the known habitations (Table 1: 8; Figs. 7–8). Three other isolated objects, namely a bronze spearhead and two pins, were found either on the surface or just under it, but without a recognisable archaeological context and far from potential habitations (Table 1: 9; Table 2: 28–29). One of the axes from the Velika planina plateau came to light outside a settlement, presumably at a distance of 100–500 m (Table 2: 26). Late Bronze Age finds of isolated objects are a widespread phenomenon along the foothills of the south-eastern Alps, interpreted as intentional deposition of votive offerings,[7] while our evidence suggests that the phenomenon also reached into the alpine zone.

Middle and Late Bronze Age sites are located roughly from 1500 to 1950 m asl in the Julian Alps, and to 1850 m asl in the Kamnik-Savinja Alps (Figs. 9–10). It would appear that this belt began below the former forest line and reached to the edge of barren rock. The higher upper boundary of sites in the Julian Alps is the consequence of a higher average altitude.

Of all the periods of prehistory, the sites from the Middle and Late Bronze Ages strongly predominate, even if disregarding the isolated finds. In the Julian Alps, the number of habitation points exceeds that of isolated finds, in the Kamnik-Savinja Alps and the Karavanke the opposite is true (Tables 5–6).

The number of alpine sites decreases dramatically in the Early Iron Age (8th–4th centuries BC), decreasing even further in the Late Iron Age (3rd–1st centuries BC; Table 1: 15–18; Table 2: 35–38). All Iron Age sites lie in a relatively narrow belt, between 1550 and 1775 m asl (Figs. 9–10). Only two reliably identified inhabited areas are known from these periods: Šija pod Košuto and Koren (Table 2: 35–36). The latter stands apart in the traces of three probably contemporaneous dwellings with stone foundations.

have as yet been dated.

[6] Stone foundations have been unearthed at Pod Kopico; *Table 1*: 7.

[7] Šinkovec 1996.

Roman period and Late Antiquity (1st–6th centuries)

Many sites in the alpine zone under discussion can be attributed to the Roman period and Late Antiquity. They revealed either remains of buildings, short-term habitations and isolated objects (Tables 3–4; Fig. 11).

We treat the sites from the 1st to the 4th century (Roman period) separately from those dating to the 5th and 6th centuries (Late Antiquity). The reason behind this separation lies in the social and economic changes that took place from the end of the 4th to the mid-5th century. They led to great shifts in the settlement pattern of the south-eastern Alps, with fortified hilltop settlements becoming the most prominent type of human habitation of Late Antiquity located up to around 1000 m asl.[8] The alpine sites yielded few finds, which makes dating them a very challenging task. Nevertheless, it is in part possible to distinguish between the coarseware forms from the Roman period and those from Late Antiquity. More diagnostic are the metal pieces of the costume. Some sites could only be dated based on the results of the charcoal analyses. Hence the chronological attribution of most sites can only roughly be estimated and may in some cases even be too narrow given the paucity of small finds (Tables 3–4).

Roman and Late Antique sites in the Julian Alps lie roughly between 1400 and 2000 m asl (only three sites above 1800 m), while in the Kamnik-Savinja Alps and the Karavanke sites have been recorded between 1450 and 1850 m asl with the exception of an isolated find at 1258 m asl (Tables 3–4; Figs. 9–10). They begin at lower altitudes and hence encompass a broader belt than the sites from the Bronze Age.

Metal finds show that the earliest sites reliably attributed to the Roman period date to the 1st or the early 2nd century. Also prominent, in the number of finds, is the 3rd and 4th centuries (Figs. 12–14).

Only three sites in the Kamnik-Savinja Alps and the Karavanke date to Late Antiquity, two of these (Dolga njiva, Kališče) to the transition from the 4th to the 5th century (Table 4: 41, 47, 48). In the Julian Alps, eleven posts are attributable to Late Antiquity, at least seven and up to ten of which were established anew (Fig. 15). Isolated Early Roman objects were discovered in the vicinity of three of these, which indicates the occasional earlier presence on the same spots. Only the site at Pod Zelenim vrhom revealed the remains of a Late Antique building in the vicinity of an earlier, Roman-period building (Table 3).

Both Roman and Late Antique buildings have a single room and drystone foundations, presumably with a wooden superstructure resting on sleeper beams (Fig. 16). Some sites occupying a central position within large geographic units yielded several contemporary buildings. For instance, the remains of three Roman buildings were found at Vodotočnik, the location of the most important source of drinking water on the plateau of Dleskovška planota (Table 4: 40; Fig. 14). Traces of three buildings were also unearthed at Gorenja Predolina (Table 3: 18; Fig. 17).

Some geographic units only revealed traces of short-term habitation (Tables 3–4).

As opposed to the Late Bronze Age, the isolated objects from the Roman period are associated with human habitations.[9] In some cases, the archaeological context indicates a special significance of such finds. A crossbow fibula was found at Za bajto below Mt. Čisti vrh, lying beside the foundations of a building, while a few metres away a knife was found placed inside a chest-like crevice in the rock. Both artefacts can be dated to around 300 and possibly connected with the construction of the building. At Pečice on Velika planina, a fibula was placed under a large rock. Nine fibulae and six coins spanning the 1st–3rd centuries were unearthed at Poljanica on the Lepa Komna plateau, scattered around the remains of a building. Such artefacts may be seen as offerings.[10]

[8] Ciglenečki 1999.

[9] With the exception of a bell found at Sušave below Velika planina; *Table 4*: 45.

[10] Cevc 2006b, 130–133.

Early Middle Ages (7th–10th centuries)

The end of the 6th and the beginning of the 7th century represents a turning point in the history of the south-eastern Alps. It is a time when Slavic populations gradually settled here and the bulk of human habitations again moved to the lowland.[11]

The early medieval alpine sites are fewer in number compared with those from the Roman period and/or Late Antiquity (Tables 3–4). They also appear to be located within a narrower altitude belt, i.e. between 1500 and 1765 m in the Julian Alps and between 1475 and 1670 m in the Kamnik-Savinja Alps and the Karavanke; they begin higher and end lower (Figs. 9–10), with a single exception in the site at Planina Razor located at 1288 m asl.[12]

In the Julian Alps, the small finds and charcoal dates from three buildings indicate uninterrupted habitation from Late Antiquity to the Early Middle Ages. Two of these buildings, at Dolga Planja on the Vogel plateau and at Kal on the Zadnji Vogel plateau respectively, were certainly already in use in the 6th century and continued to be inhabited into the 8th or the 9th century.[13] The third, unearthed at Polje in the alp of Zgornja Krma also yielded pottery attributable to both periods. All three have substantial drystone foundations.

In the Early Middle Ages, new dwellings were constructed at Klek, Konta above the Govnjač alp, possibly also at Vodene rupe, in the vicinity of the remains of earlier buildings from the Roman period or Late Antiquity. Five sites revealed buildings constructed on previously unoccupied spots. All are individual buildings with substantial drystone foundations – similarly as in Late Antiquity. Found beside the buildings at Klek and Dolga Planja were concentrations of iron ore, which suggests mining activities.[14]

To the contrary, no clear continuity of habitation has been observed in the Karavanke and the Kamnik-Savinja Alps; only Kališče revealed an early medieval post in the vicinity of one attributable to Late Antiquity. Moreover, the early medieval remains are scarcer and mainly interpreted as traces of occasional human presence. With a possible exception of Krvavec, no sites revealed visible remains of stone building foundations.

Conclusion

There are instances of the same alpine areas being chosen for habitation in different periods, frequently even the same microlocations that served as shelters or resting places. Most sites with the human presence recorded in several periods, however, provided no evidence of a continuous occupation. Tradition may have played a role in the choice of location, but the natural environment appears to have been a much more decisive factor.

There are periods of more numerous and more intense habitation remains, but also those of only scarce traces (Tables 5–6). A higher number of sites in a given period usually goes hand in hand with the sites occurring across a broader altitude belt; in contrast, less numerous sites lie within a narrower belt. The former may indicate a more intense and broader use of the alpine zone. The different economic activities, such as hunting, dairy farming and transhumance, create archaeological records of varying intensities.[15]

The results of the radiocarbon analyses have indicated a phase of human presence in the alpine zone at the end of the 4th and the first half of the 3rd millennium BC. That said, the phase is not well supported by archaeological artefacts. What is more certain is that we have no evidence of human presence between the mid-3rd and the first half of the 2nd millennium BC.

The alpine zone becomes more densely

[11] Bratož 2014.

[12] Other present-day alps in the area, i.e. the Soča Valley, are also located at relatively low altitudes.

[13] Ogrin 2006, 100–102; Ogrin 2010, 202; Ogrin, per. comm.

[14] Ogrin 2006, 103; Ogrin 2010, 203; Ogrin, per. comm.

[15] Walsh et al. 2014; Carrer 2015.

inhabited in the Middle and Late Bronze Ages, particularly in the early phase of the Urnfield culture period (13th–11th centuries BC). Bronze Age sites lie within a broad belt stretching from 1500 to 1950 m asl (Figs. 9–10). They are dwellings of a seasonal nature, probably constructed entirely of wood. Isolated metal objects came to light outside inhabited areas, mainly presumed to be votive offerings, and speak of an extensive and multifarious use of the zone.

The alpine zone in the following, Early and Late Iron Ages is again very scarcely populated, with sites occurring within a relatively narrow belt, between 1550 and 1775 m asl.

The highest number of alpine sites dates to the Roman period and covers a belt between 1400 and 2000 m asl. Their number is considerably higher even in comparison with the Bronze Age,[16] they also occur across a broader altitude belt. This suggests that the alpine economic space in the Roman period came to include lower altitudes, which could signify additional deforestation. The sites predominantly comprise individual buildings with drystone foundations, only rarely groups of houses. There is also a custom of offering single items in the vicinity of houses.

In Late Antiquity and the Early Middle Ages, there are noticeable differences between the areas of the Julian Alps, on the one side, and of the Karavanke and the Kamnik-Savinja Alps, on the other.

Only two sites in the Karavanke and the Kamnik-Savinja Alps belong to the 4th and 5th centuries, i.e. the beginning of Late Antiquity (Dolga njiva, Kališče). The building at Dolga njiva had substantial drystone foundations. The small finds from the Velika planina plateau only indicate a short-term stay in the 5th or the 6th century. More sites belong to the Early Middle Ages, mainly lying in areas of no known previous occupation. With the exception of Krvavec and Pungart on the Zelenica alp, they are small posts marked as short-term habitations. The current evidence thus suggests that the Kamnik-Savinja Alps and the Karavanke were less visited or exploited in Late Antiquity, it also points to a discontinuity with the Early Middle Ages.

In the Julian Alps, eleven sites date to Late Antiquity, which is only slightly less than in the previous, Roman period. A single site lies in an area that also revealed earlier buildings (Pod Zelenim vrhom). Most Late Antique buildings seem to have been constructed anew, although some of these buildings revealed isolated Early Roman objects in their vicinity. The sites are located at roughly the same altitudes as in the previous period and the technique adopted for constructing the stone foundations is similar.

The number of sites in the Julian Alps remains the same into the Early Middle Ages, but they no longer reach to such high altitudes; they are mostly located between 1450 and 1765 m asl (Figs. 9–10).[17] At three sites, the same buildings have provided evidence of continuous habitation from the 6th to the 9th century. New posts grew on previously uninhabited spots (five sites) and revealed a similar construction as in Late Antiquity – buildings with substantial drystone foundations. It would appear that the Julian Alps witnessed no major break in the economic activities between Late Antiquity and the Early Middle Ages; some of the old posts remained in use and others appeared anew. The most prominent difference regarding the transition is the apparent absence of early medieval sites above 1800 m asl, i.e. a drop in the upper boundary of habitation, while the lower boundary remained the same.

Considerable amounts of iron ore collected at Dolga Planja and Klek suggests a connection with ironworking. This economic activity went on to become very prominent in the Julian Alps during the High Middle Ages and the early post-medieval period.[18]

[16] The stone foundations make the identification of Roman and later buildings much easier in comparison to those from prehistory.

[17] Standing apart is Planina Razor at 1288 m asl.

[18] Bizjak 2006; Oitzl 2018, 79–87.

The traces of human habitations in the alpine zone of Slovenia, which occur at the transition from the 4th to the 3rd millennium BC, as well as the multitude of sites from the Middle and Late Bronze Ages offer a picture that corresponds quite well with the general development in the wider Circum-Alpine region. The vertical seasonal transhumance develops intensely from the mid-3rd millennium BC onwards.[19] Dairy processing in the alpine zone begins in the Late Bronze or at the onset of the Early Iron Age, and is accompanied by constructing permanently occupied huts with stone foundations, as well as erecting enclosures.[20] A decrease in the number of Early and Late Iron Age sites, such as has been noted in the south-eastern Alps, is also known in several other regions.[21]

The south-eastern Alps do stand apart to a certain degree in the high number of new sites at the beginning of the Roman period. The southern French and southern Central Alps yielded very few sites from the Late Iron Age and the Roman period, even though the palaeoecological research has indicated intensive alpine pastoralism. This development is seen as the consequence of changes in the economic activities. Researchers posit an abandonment of dairy economy in the alpine zone and a predominance of transhumance mainly aimed at providing wool, meat and hides to the cities of Provence and northern Italy.[22]

The available evidence for the south-eastern Alps does not allow us to speculate on the function of the sites from the Roman period. Apart from a connection with alpine pastoralism in one form of another, they may also be related to miners who came to the mountains to collect iron ore. The development of iron working in the High Middle Ages indicates that its roots may date back at least to the Roman period.

The differences observed between the Kamnik-Savinja Alps and the Karavanke, on the one side, and the Julian Alps, on the other, during Late Antiquity and the Early Middle Ages probably mirror the differing conditions in the valleys below. The Kamnik-Savinja Alps and the Karavanke rise above an area that suffered greatly during the Migration period and, as a consequence, presumably witnessed a great reduction in the number of inhabitants. This may be reflected in the partial discontinuity of alpine exploitation. In contrast, the Julian Alps are removed from the main routes and the economically attractive areas. The old Roman population could have survived here in greater numbers and for a longer period.[23] The alpine sites in the Julian Alps may, in fact, be evidence of an economic continuity between Late Antiquity and the Early Middle Ages.

Acknowledgments:

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[19] E.g. Marzatico 2007; Carrer 2013; Carrer 2015, 4–6; Walsh et al. 2014; Reitmaier 2017; Hafner, Schwörer 2018.

[20] Carrer et al. 2016; Reitmaier 2017, 44; Reitmaier 2018 et al.

[21] E.g. Dachstein: Mandl 1996; southern French Alps: Walsh et al. 2014.

[22] Walsh 2014; Carrer 2015.

[23] Comp. Milavec, Modrijan 2014.

Captions:

Fig. 1: Poljanica on the Zadnji Vogel plateau. Site of a prehistoric dwelling and a Roman short-term habitation.

Fig. 2: Kravja dolina. Remains of the stone foundations of a building, presumably from Late Antiquity.

Fig. 3: Mišeljski preval. Site of a short-term habitation from Late Antiquity and possibly already the Late Bronze Age.

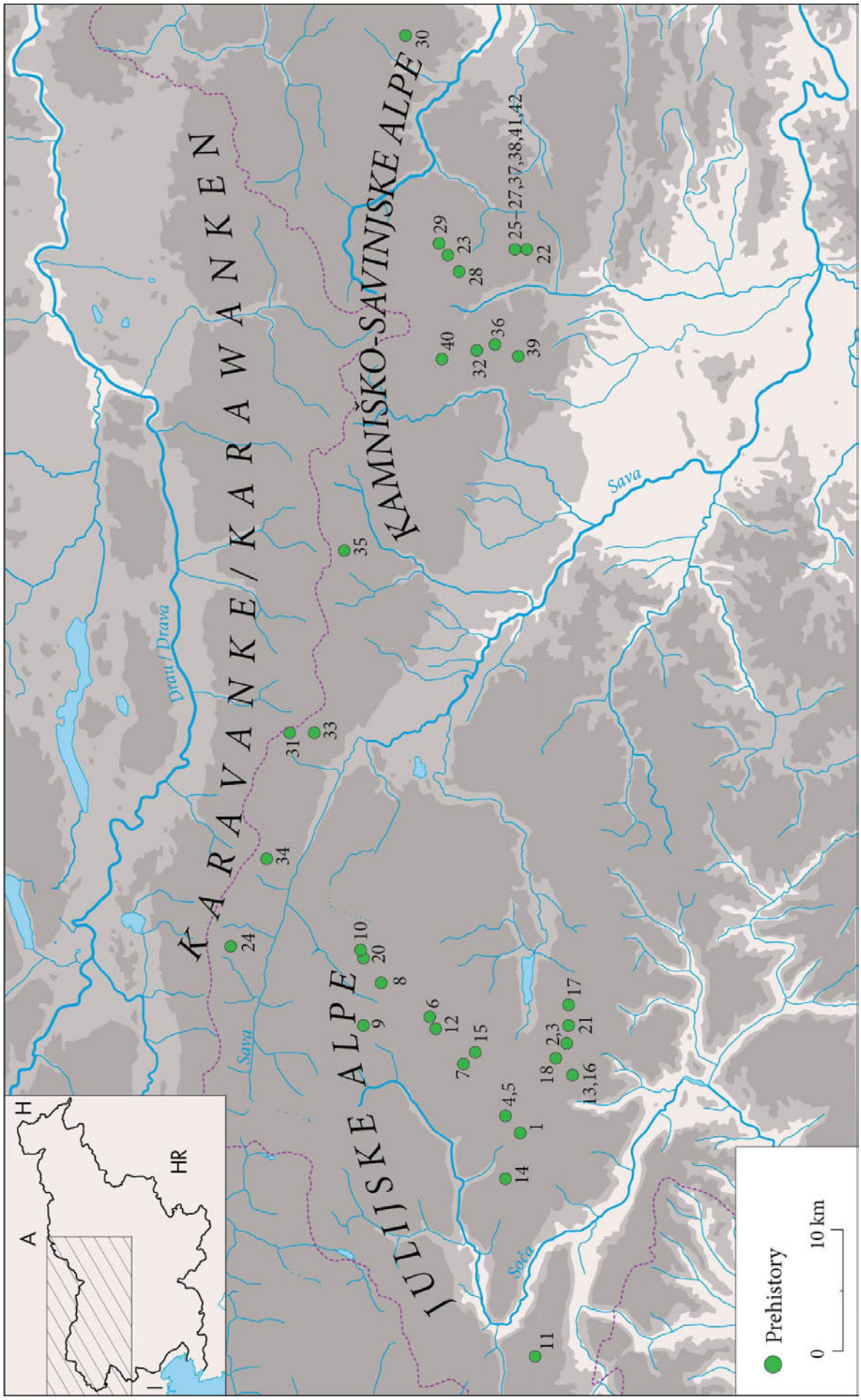

Fig. 4: Prehistoric sites in the Julian Alps, the Karavanke and the Kamnik-Savinja Alps. For site numbers see Tables 1–2.

Fig. 5: Dolge njive below Škrbina. Site of a simple dwelling from the Late Bronze Age.

Fig. 6: Pečice on the Velika planina plateau. Habitation site from the Late Bronze Age.

Fig. 7: Spodnja Blejska konta. Spearhead upon discovery.

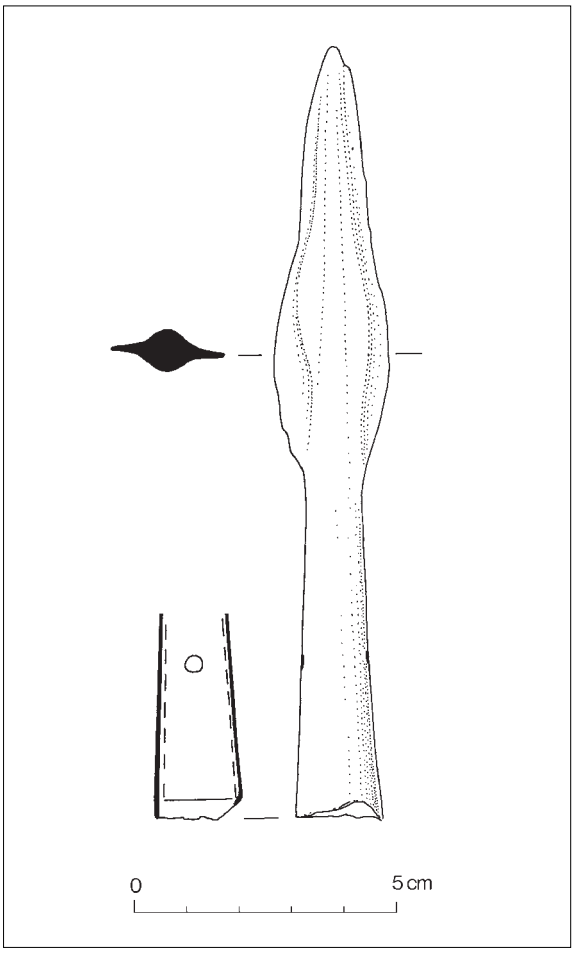

Fig. 8: Spodnja Blejska konta. Spearhead, 13th–11th centuries BC.

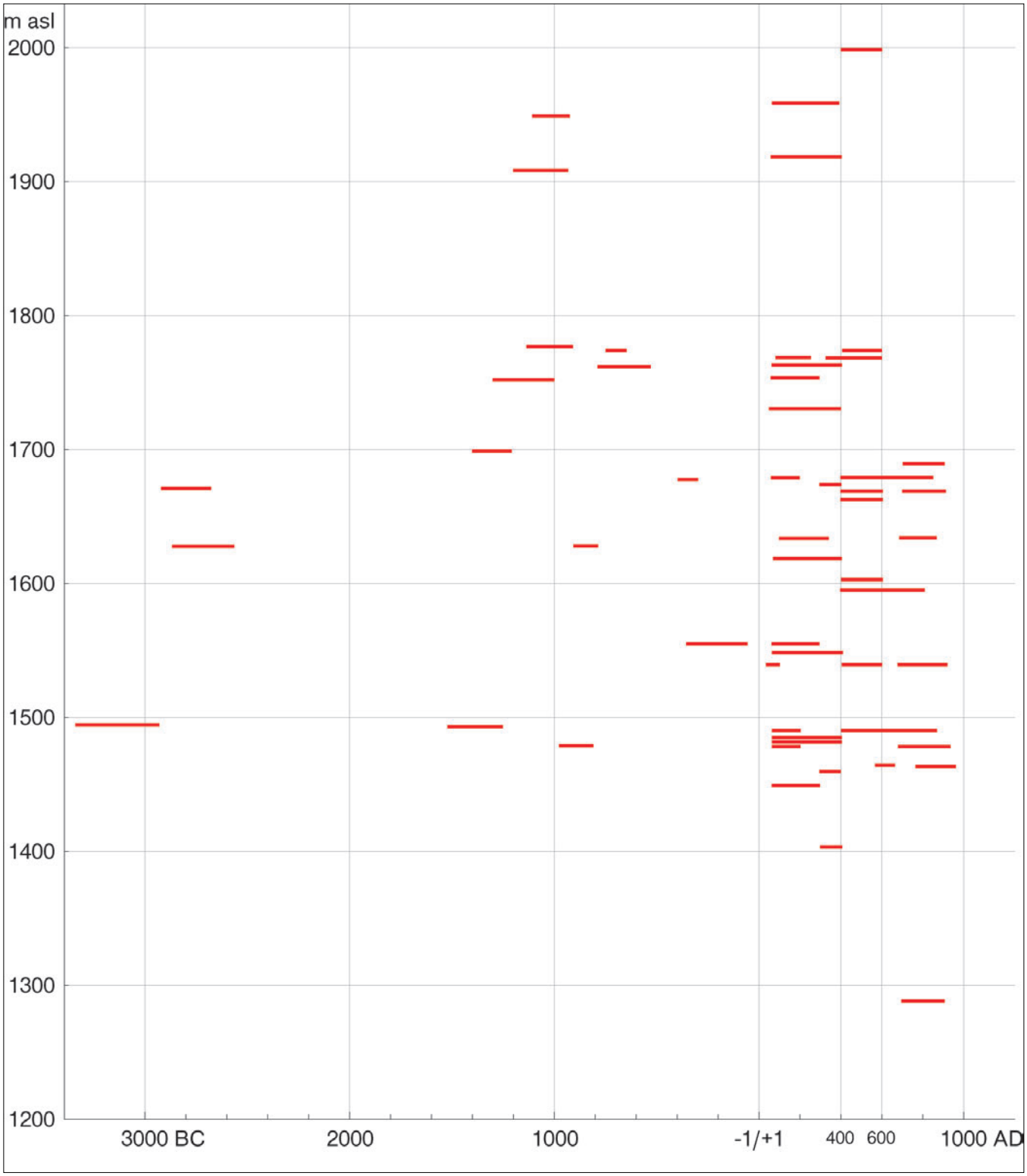

Fig. 9: Chronology and altitude of sites in the Julian Alps.

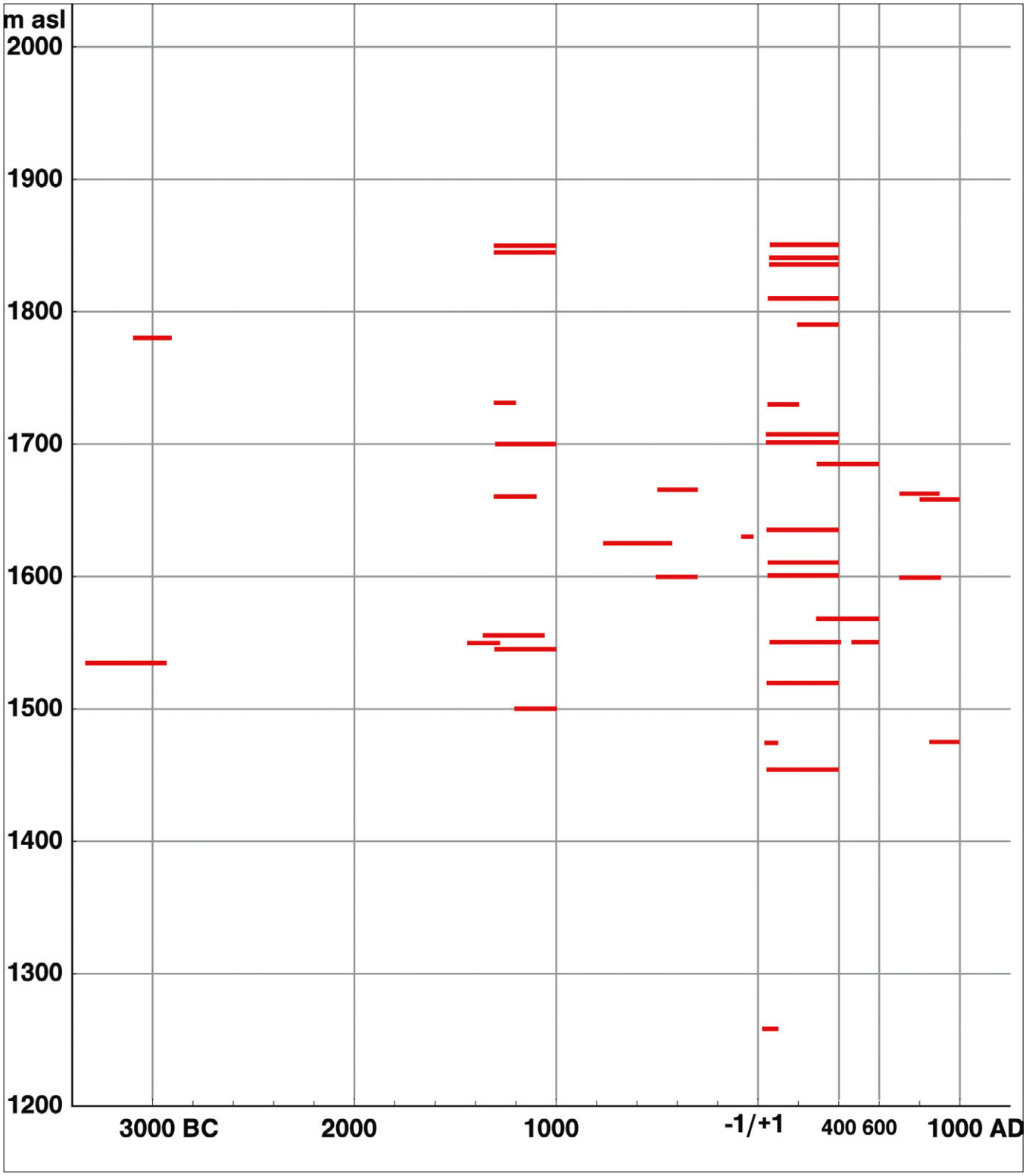

Fig. 10: Chronology and altitude of sites in the Kamnik-Savinja Alps and the Karavanke.

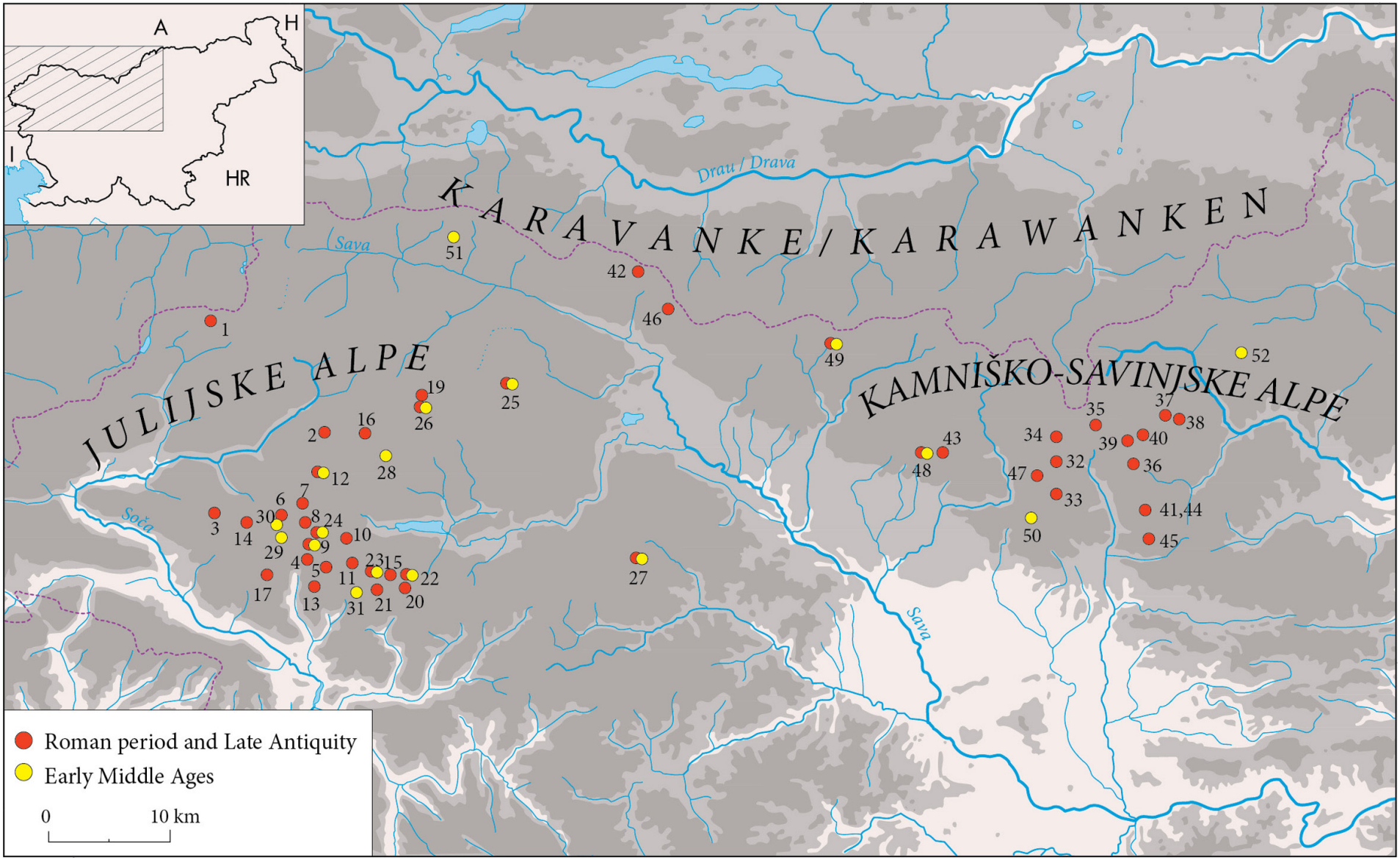

Fig. 11: Roman, Late Antique and early medieval sites in the Julian Alps, the Karavanke and the Kamnik-Savinja Alps. For site numbers see Tables 3–4.

Fig. 12: Zgornja jama on the pass of Mangartsko sedlo. Site of a building constructed next to a boulder, 3rd–4th centuries.

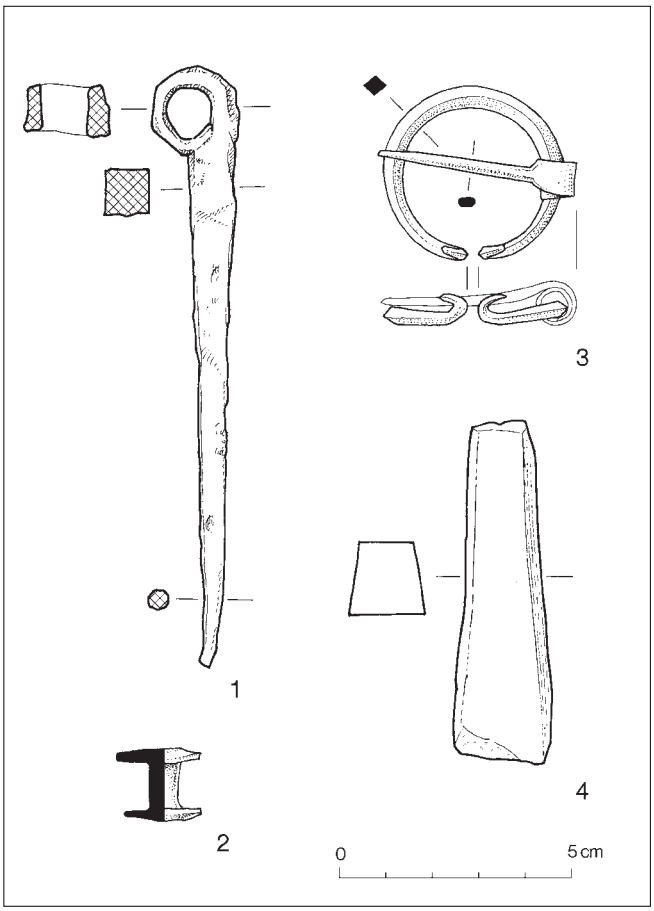

Fig. 13: Zgornja jama on the pass of Mangartsko sedlo. Selection of small finds unearthed around the building. 1 iron, 2–3 bronze, 4 whetstone.

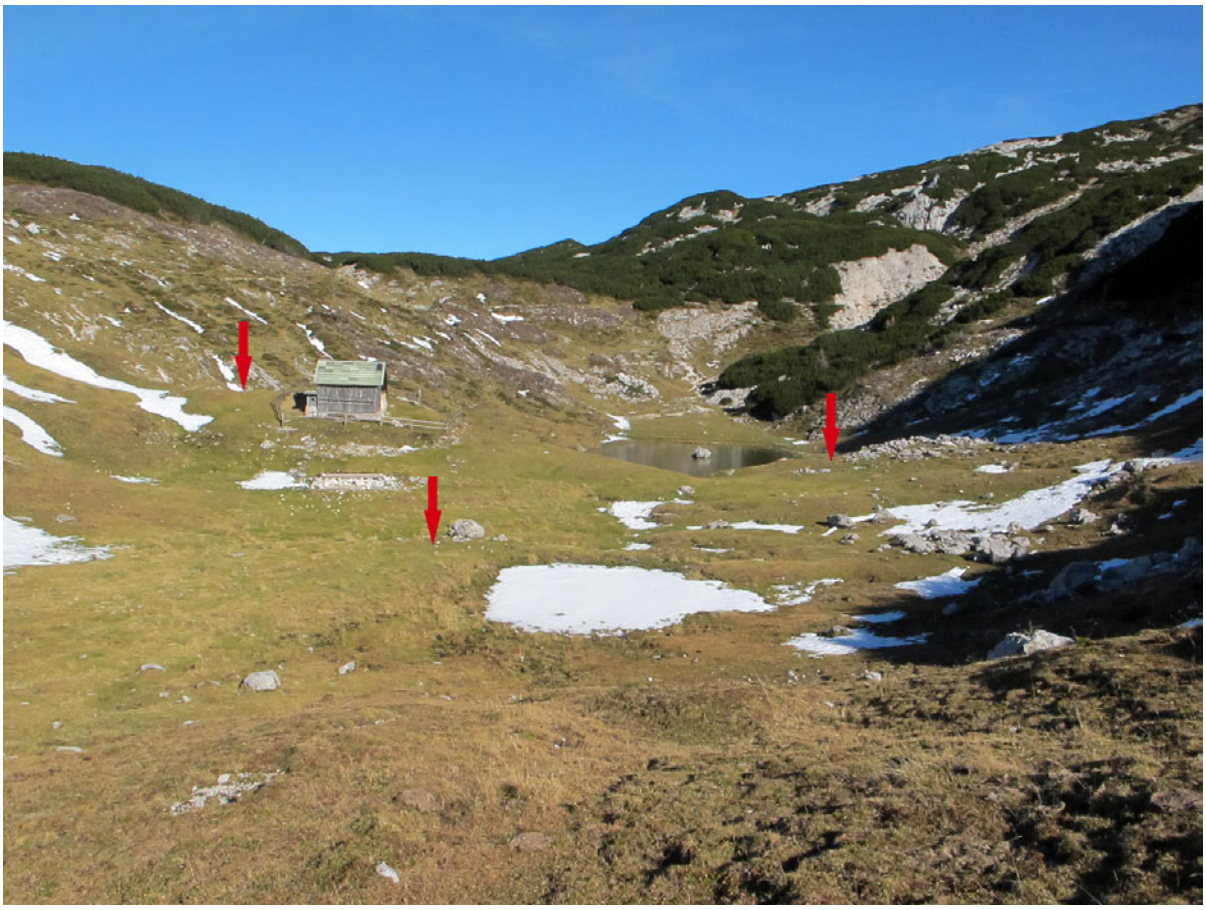

Fig. 14: Vodotočnik. Site of three buildings from the Roman period.

Fig. 15: Palec. Site of a building from Late Antiquity.

Fig. 16: Dolga njiva. Stone foundations of a building, 4th–5th centuries. Photo F. Stele.

Fig. 17: Gorenja Predolina. The hill in the centre of the photo is the site of a Late Antique building.

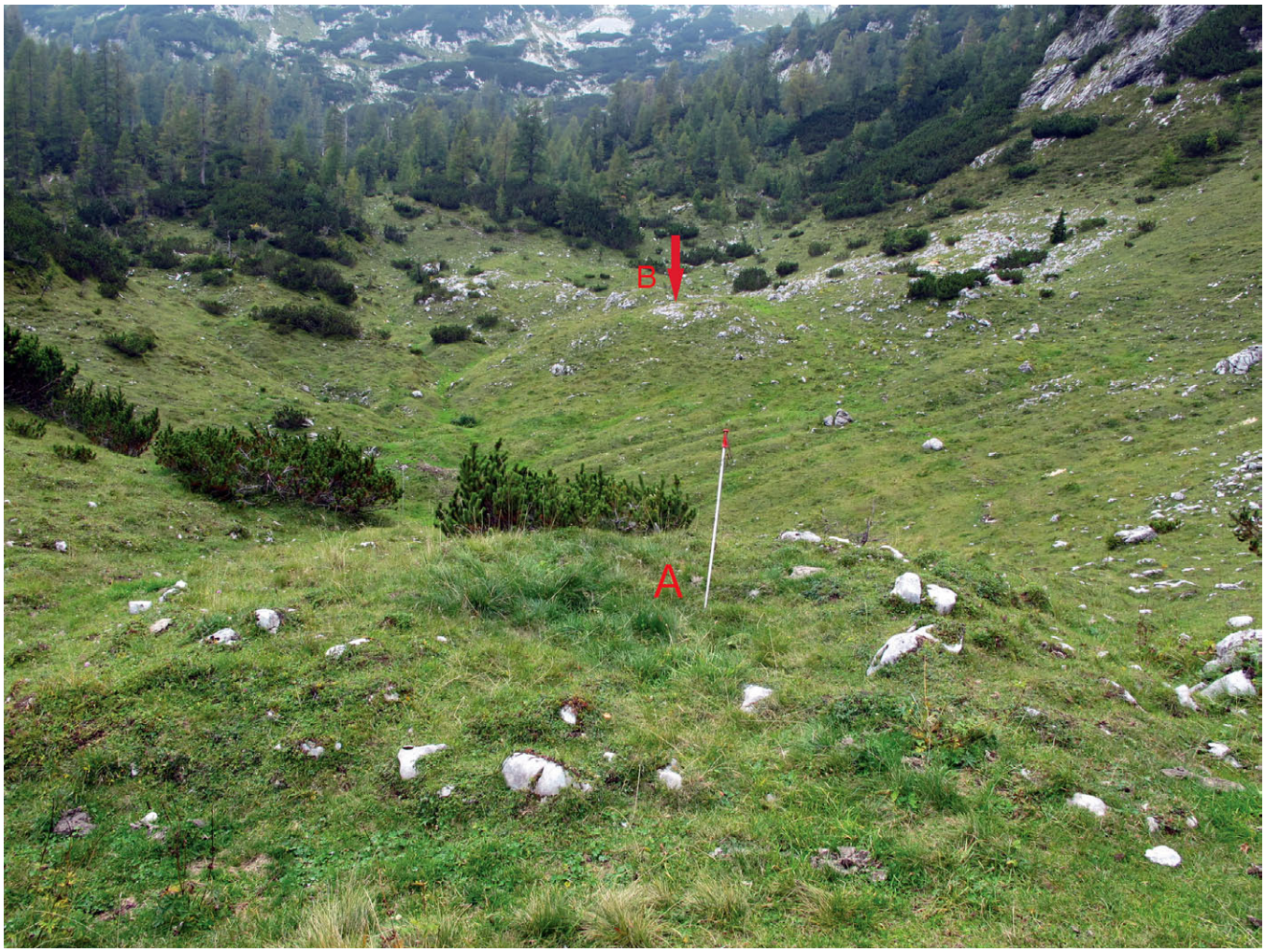

Fig. 18: Vodene rupe. Remains of an early medieval (A) and a presumably Roman period building (B).

Tables:

Table 1: The Julian Alps. Prehistoric sites and their altitude, site type, radiocarbon dates of wood charcoal, as well as small finds. The calibrated dates for Sites 2–5 are taken from Ogrin (2010, 201).

				Charcoal				Artefacts	
No.	**Site**	**m asl**	**Site type**	**Sample**	**Lab. no.**	**Date BP**	**Date cal. BC 2σ**	**Type**	**Dating**
1	Mali Lepoč below Mt. Bogatin, Area 3	1674	Simple dwelling	VIS 14/06	Poz-72346	4250 ±40	2926–2680	Pottery	Prehistory
2	Kal on Zadnji Vogel	1495	Short-term	1	-	-	3350–2930	Pottery	Prehistory
3	Kal on Zadnji Vogel	1495	Short-term	2	-	-	1520–1250	Pottery	Prehistory
4	Poljanica on Lepa Komna	ca. 1630	Simple dwelling?	1	-	-	2870–2570	Pottery, stone artefacts	Prehistory
5	Poljanica on Lepa Komna	ca. 1630	Simple dwelling?	2	-	-	900–790	Pottery, stone artefacts	Prehistory
6	Mišeljska planina	1699	Short-term	VIS 14/07	Poz-72347	3040 ±30	1397–1216	Pottery	Prehistory
7	Pod Kopico	1950	Building	VIS 13/07	Poz-63355	2850 ±30	1111–927	-	-
8	Spodnja Blejska konta	1753	Isolated object	-	-	-	-	Spear	13th–11th c. BC
9	Polje in Zgornja Krma	1590	Isolated object	-	-	-	-	Spear	Bronze Age
10	Lipanca	ca. 1650	Isolated object	-	-	-	-	Dagger	Bronze Age
11	Kobariški stol	?	Isolated object	-	-	-	-	Axe	12th–11th c. BC
12	Mišeljski preval	1918	Building?	VIS 14/08	Poz-72349	2885 ±35	1196–940	Pottery	Late Antiquity
13	Pod Zelenim vrhom, Building 1	1778	Building?	VIS 14/09	Poz-72350	2860 ±35	1127–919	Pottery	Roman period
14	Goričica, Pit 3	1482	Simple dwelling	VIS 14/19	Poz-72360	2730 ±35	971–809	Pottery	Bronze Age, Roman period
15	Vodene rupe, Building 2	1765	?	VIS 14/02	Poz-72341	2505 ±30	787–540	Pottery	Prehistory, Roman period
16	Pod Zelenim vrhom	1775	Isolated object	-	-	-	-	Pin	second half of the 8th and first half of the 7th c. BC
17	Dolga planja	1680	Isolated object	-	-	-	-	Fibula	4th c. BC
18	Snežna konta, Area 1	1558	?	VIS 13/15	Poz–63365	2150 ±30	356–61	Pottery	Roman period
19	Zgornji Povden	1365	Short-term habitation	-	-	-	-	Pottery	Bronze Age
20	Nove Koče above Lipanca	1725	?	-	-	-	-	Pottery	Prehistory
21	Poljanica on Zadnji Vogel	1400	Simple dwelling	-	-	-	-	Pottery, stone artefacts	Prehistory

Table 2: The Kamnik-Savinja Alps and the Karavanke. Prehistoric sites and their altitude, site type, radiocarbon dates of wood charcoal, as well as small finds.

				Charcoal				Artefacts	
No.	Site	m asl	Site type		Lab. no.	Date BP	Date cal. BC 2σ	Type	Dating
22	Mala planina	1534	Short-term habitation	VIS 14/25	Poz-72366	4435 ±35	3330–2926	Stone artefacts, pottery	Prehistory
23	Vrtače on Dleskovška planota	1778	Short-term habitation	VIS 13/01	Poz-63348	4370 ±35	3090–2906	Pottery	Prehistory
24	Terčarca	1548	Simple dwelling	VIS 13/17	Poz-63367	3100 ±30	1431–1283	Pottery	Prehistory
25	Velika planina - Pečice	1557	Simple dwelling	VIS 14/23	Poz-72364	2975 ±30	1368–1059	Stone artefacts, pottery	13th–11th c. BC
26	Velika planina - Za Maklenovcem	ca. 1550	Isolated object	-	-	-	-	Axe	13th–11th c. BC
27	Velika Planina - Dovja raven	ca. 1500	Isolated object	-	-	-	-	Axe	12th–11th c. BC.
28	Čohavnica	ca. 1850	Isolated object	-	-	-	-	Pin	13th–11th c. BC
29	Korita	ca. 1660	Isolated object	-	-	-	-	Pin	13th–12th c. BC
30	Mozirska planina	?	Isolated object	-	-	-	-	Spear	13th–11th c. BC
31	Medvedjek	ca. 1700	Isolated object	-	-	-	-	Dagger	13th–11th c. BC
32	Dolge njive below Škrbina	1845	Simple dwelling	-	-	-	-	Knife, pottery	13th–11th c. BC
33	Pri močilu on Belščica	1730	Simple dwelling	-	-	-	-	Pin, pottery	12th c. BC
34	Dovška planina	?	Isolated object	-	-	-	-	Axe	10th–9th c. BC
35	Šija below Mt. Košuta	1625	Simple dwelling	VIS 13/19	Poz-63369	2480 ±30	774–434	Pottery	Prehistory
36	Koren	1665	Three buildings	-	-	-	-	Fibulae, torque, pottery	5-4th cent. BC
37	Velika planina - Špauska raven	ca. 1600	Isolated object	-	-	-	-	Knife	5th–4th c. BC
38	Velika planina - Za plečam	1630	Isolated object	-	-	-	-	Fibula	Mid-1st c. BC
39	Kriška planina on Mt. Krvavec	1500	Simple dwelling	-	-	-	-	Pottery	Prehistory
40	Spodnje jame below Mt. Grintavec	1910	Building	-	-	-	-	Pottery	Prehistory
41	Velika planina - Nandetova jama	ca. 1450	Isolated object in a cave	-	-	-	-	Pottery	Prehistory
42	Velika planina - Pri Veliki jami	1565	Short-term habitation	-	-	-	-	Pottery	Prehistory

Table 3: The Julian Alps. Sites from the Roman, Late Antique and early medieval periods.

No.	Site	m asl	Dating partly based on 14C date	Roman period 1st–4th c.	Late Antiquity 5th–6th c.	Early Middle Ages 7th–10th c.
1	Zgornja jama on Mangartsko sedlo	1960		●		
2	Za Bajto below Mt. Čisti vrh	1673		●		
3	Goričica	1482		●		
4	Dobrenjska Planja	1755		●		
5	Pod Zelenim vrhom	1771	*	●	●	
6	Pod Monturo	1728		●		
7	Poljanica on Lepa Komna	1620		●		
8	Gracija	1556		●		
9	Konta above Govnjač	1638	*	●		●
10	Krošnja	1449		●		
11	Snežna konta	1550		●		
12	Vodene rupe	1765	*	●		●
13	Planina na Kalu below Mt. Tolminski Migovec	1485		o		
14	Doliči	1460		o		
15	Poljanica on Zadnji Vogel plateau	1406		x		
16	Mišeljski preval	1918			●	
17	Palec	1605			●	
18	Gorenja Predolina	1665			●	
19	Kravja dolina	2000			●?	
20	Pod Šijo	1670			o	
21	Krnica below Mt. Vogel	1770			o	
22	Dolga Planja	1680		x	●	●
23	Kal on Zadnji Vogel plateau	1490		x	●	●
24	Govnjač	1464	*		●	●
25	Klek	1540		x	●	●
26	Polje in Zgornja Krma	1593			●	●
27	Pečana	1480		x		●
28	Krstenica	1670				●
29	Mali Lepoč below Bogatinsko sedlo	1680	*			●
30	Veliki Lepoč below Bogatinsko sedlo	1690	*			●
31	Planina Razor	1288				●

Legend:
● simple dwelling or building
o short-term habitation
x isolated object
* radiocarbon date

Table 4: The Kamnik-Savinja Alps and the Karavanke. Sites from the Roman, Late Antique and early medieval periods.

No.	Site	m asl	Dating based on 14C date	Roman period 1st–4th c.	Late Antiquity 5th–6th c.	Early Middle Ages 7th–10th c.
32	Dolge njive below Škrbina	1842		●		
33	Koren	1792		●		
34	Ovčarija in Kalce	1700		●?		
35	Na stanu below Kamniško sedlo	1455		●		
36	Rzenik	1635		●		
37	Sedelce on Dleskovška planota	1836		●		
38	Smrekočka dolina	1521		●		
39	Čohavnica	1850		●		
40	Vodotočnik	1810		●		
41	Velika planina - Pečice	1550		●	o	
42	Svečica	1700		o?		
43	Dolga njiva below Mt. Cjanovca	1609		o?		
44	Velika planina - Na Jamah	1600		o		
45	Sušave	1258		x		
46	Pri močilu on Belščica	1730		x		
47	Dolga njiva	1685		●	●	
48	Kališče	1568		●	●	o
49	Pungart on Zelenica	1475		●		●
50	Krvavec	1600				●
51	Bašinov breg	1659	*			o
52	Planina Loka	1660				o

Legend:
● simple dwelling or building
o short-term habitation
x isolated object

Table 5: The Julian Alps. Number of sites in different periods.

Period	Simple dwelling / building / short-term habitation	Isolated object
4th–3rd millennium BC	3	-
Middle and Late Bronze Age	7	4
Early Iron Age	1	2
Late Iron Age	1	-
Prehistory – undefined	3	-
Roman period (1st–4th c.)	14	5
Late Antiquity (5th–6th c.)	12	-
Early Middle Ages (7th–10th c.)	12	-

Table 6: The Kamnik-Savinja Alps and the Karavanke. Number of sites in different periods.

Period	Simple dwelling / building / short-term habitation	Isolated object
4th–3rd millennium BC	2	-
Middle and Late Bronze Age	4	7
Early Iron Age	2	1
Late Iron Age	-	1
Prehistory – undefined	4	-
Roman period (1st–4th c.)	16	2
Late Antiquity (5th–6th c.)	3	-
Early Middle Ages (7th–10th c.)	5	-

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