



Preliminary archaeological studies on the route of Rail Baltic

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INTRODUCTION

The project of a new railway, called ‘Rail Baltic’ (below: RB) – which is going to connect Tallinn, Riga and Kaunas with Central and Western Europe – reached Estonian archaeologists in autumn 2013. As the politicians had decided to route this railway on a completely new line, from Tallinn via Pärnu to Riga, the task for archaeologists comprised a full-scale archaeological investigation of this route before starting any earthwork. This research – carried out by the University of Tartu and financed by the Technical Regulatory Authority – was planned in three stages (see also Kadakas & Lang 2016).

Stage 1 involved archival studies with the purpose to find out all probable archaeological sites on the way of the RB. As there were initially numerous alternative routes on the table, this stage meant enormous work with various archive files, literature and maps that could bear some information of probable archaeological sites. The work was mostly done by MA and PhD students of the University of Tartu in late 2013 and early 2014. The results (Lang 2013; 2014) were taken into account for selecting the final route of RB by corresponding authorities.

Stage 2 meant full-scale archaeological landscape survey on the final route of RB (Fig. 1). That is, the archaeologists had to

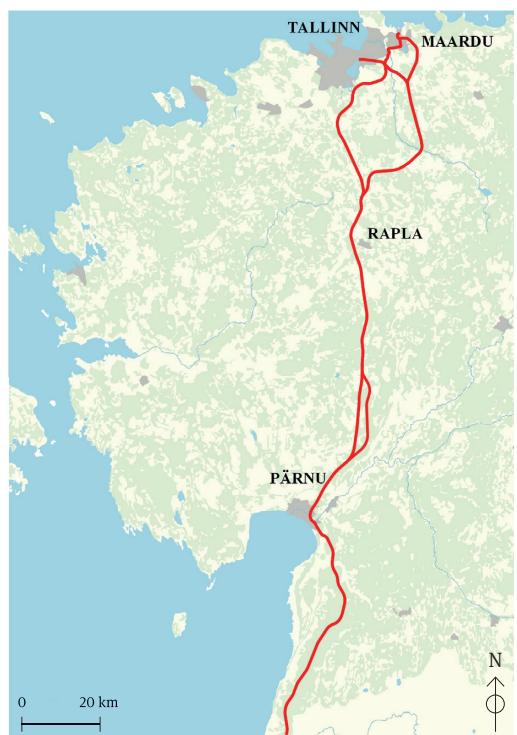


Fig. 1. Location of the Rail Baltic route surveyed in 2015.
Jn 1. 2015. aastal uuritud Rail Balticu trassi paiknemine.
Drawing / Joonis: Andres Kimber

walk over the entire (*ca.* 240 km long and 66 m wide) area of RB trying (a) to find as many sites as possible (in order to minimise the probability of discovering new sites during the construction of the railway), (b) to evaluate the situation around the already known and registered sites (*ca.* 40), whether and how much is needed to excavate them properly, and (c) to excavate some sites, which we knew already at the time that they must be excavated before constructing the railway line. This work was carried out in the summer and autumn of 2015.

Stage 3 will embrace archaeological excavations at those sites that were found during stage 2.

This article will briefly discuss fieldwork during stage 2: both the methods of investigation and the main results.

METHODS

As mentioned, the entire route of RB was walked over by the archaeologists. For that purpose, four groups were formed, each of them being responsible for a certain part of the route. Before the actual field-walking started, the group leaders went through all available maps in the databases of Estonian Land Board (<http://geoportaal.maaamet.ee>) and Google Maps (<https://www.google.ee/maps>). On ortophotos we were searching either for areas of black soil on cultivated fields (probable occupation layers of settlement sites) or anomalies in vegetation of not-cultivated areas probably referring to remains of buildings (houses, graves, field-baulks, roads, etc.). Relief layers of maps were checked next as well as maps of cultural heritage. On historical maps, we were looking for old farmsteads, roads and borders that do not exist anymore. These maps also assisted to locate old wetlands (drained today) as unsuitable areas for prehistoric or medieval settlement. In addition, we also studied old plans (from the late 17th century onwards), available in the Estonian National Archives (<http://www.ra.ee/kaardid>), with the purpose to find out old farms and villages, various buildings, place names referring to probable ancient sites, and boundary stones.

All information which could present some interest and be useful was marked on basic maps (1:20,000) that were used when moving on the landscape. All trajectories of walking were tracked and saved in GPS stations *Garmin Oregon 600*.

The main method of fieldwork was field-walking and visually looking for sites. It was relatively easy to study open soils of cultivated fields; open soils were quite often to be found also in forested areas (both under wind-fallen trees and where turned over by wild boars). In areas with dense vegetation, soils were prodded with a soil sound or trial pits were dug where needed (Fig. 2). In the territory of the present-day Pärnu city, boring with the help of a machine was carried out, in order to study buried layers under thick later deposits (Fig. 3). Metal detectors were mainly used on spots of historical (but vanished) farmsteads to establish whether these locations were inhabited already in early modern, medieval or prehistoric times. Metal detectors were also used in searching for other sites, e.g. village cemeteries and ancient battle fields, and in studying the surroundings of cup-marked stones and some other stone constructions. All positive features in the landscape were studied with the purpose to check whether they contain remains of historical or prehistoric graves, clearance cairns, house foundations or stone walls. All bigger boulders were checked as well in order to find cup-marks or other carvings (boundary marks).

All trial pits as well as all discovered sites were described in detail, photographed and mapped with the help of the GPS stations. Detailed reports were compiled in autumn and

delivered in late December 2015 (Kriiska *et al.* 2015a; 2015b; Tvauri *et al.* 2015; Vedru & Luik 2015; Laneman *et al.* 2015).

RESULTS

As mentioned above, the entire route from Tallinn to Ikla on Estonian-Latvian border was fieldwalked by archaeologists. The number of new discovered sites remained relatively small, however. In Pärnu County (inventoried by a group headed by Aivar Kriiska), seven sites of fossil fields were found; these sites were marked either with clearance cairns or buried cultivated layers under the topsoil. Several stone walls, boundary stones and deserted farms of unknown date were also registered. In Rapla County (headed by Andres Tvauri), seven groups of (at least 48) clearance cairns, a probable cup-marked stone, a boundary stone (Fig. 4), a farmstead from the 17th century, and a couple of stone walls were discovered. In Harju County two routes had to be explored because the final decision was still not made when fieldwork started (cf. Fig. 1). In the easternmost variant, which later was not chosen for the building of the railway, new sites except a deserted farmstead of unknown date were not found (group headed by Gurly Vedru). In the westernmost route, however, three new cup-marked stones and a Stone Age settlement site surrounding one of them (Reg. No. 2616) were reported. Some field remains and a settlement site were also discovered and the boundaries of the occupation layer of an Iron Age settlement site (Reg. No. 18828) were specified in this route (headed by Aivar Kriiska).

Two larger excavations took place within stage 2 of the RB project as well. One was carried out on the stone grave at Alu (Raplamaa; Reg. No. 12155) and was headed by Margot Laneman, Valter Lang and Ragnar Saage (Laneman *et al.* 2015; Laneman *et al.*, this volume). Two burials from the Pre-Roman



Fig. 2. Digging trial pits on the presumable location of the ‘path of Ott’ at KilkSAM.

Jn 2. Prooviaukude tegemine päärimusliku Oti tee asuko-hal KilkSAMal.

Photo / Foto: Kerkko Nordqvist



Fig. 3. Boring by machine for sampling in Pärnu.

Jn 3. Masinpuurimine Pärnu linnas.

Photo / Foto: Aivar Kriiska



Fig. 4. Boundary stone on a fossil field in Röa.

Jn 4. Piirikivi Röa muinaspöllul.

Photo / Foto: Andres Tvauri

Iron Age were discovered there under the clearance heap of late prehistoric and historical times. In Harjumaa, the surroundings of four cup-marked stones and a part of the newly discovered Stone and Iron Age site at Soodevahe were excavated by Andres Kimber, Kristiina Paavel and Aivar Kriiska (Kriiska *et al.*, 2015a; Paavel *et al.* this volume). The majority of material assemblage of the site originates from the Corded Ware period. The results of both excavations are more precisely reported in separate articles in this volume.

CONCLUSION

As a result of the investigations of stages 1 and 2, it can be concluded that the new railway is routed along the periphery of prehistoric and historical cultural landscape; therefore, the future construction of the RB will hopefully cause relatively small losses on archaeological heritage. At the same time, this is not only the narrow track of the railway under which everything will be destroyed; many other areas of extracting sand and gravel for the building that will be in danger must be considered. Such areas are usually at higher spots in the landscape that were often used for burying the dead or building houses and forts in older times. All these locations must be archaeologically surveyed before the mining.

From the aspect of archaeological heritage, this project was planned and carried out rather well. The archaeologists had sufficient time for making preparations (stage 1) and they received adequate resources for making both field walking and larger excavations in stage 2. This project will certainly serve as a positive example of large-scale archaeological inventories for the future.

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RAIL BALTICU RAUDTEETRASSI ARHEOLOOGILISED EELUURINGUD

Valter Lang, Aivar Kriiska, Andres Tvaauri ja Gurly Vedru

2015. aasta teisel poolel viis Tartu Ülikooli arheoloogia osakond Tehnilise Järelevalve Ameti tellimisel läbi Rail Balticu raudteetrassi arheoloogiliste eeluuringute II etapi uurimistööd. I etapp toimus juba 2013.–2014. aastal ning see hõlmas kõikide alternatiivsete trassilöikude uurimist arhiiviandmete põhjal. II etapi sisus oli kogu lõpliku trassi (jn 1) läbi käimine eesmärgiga (a) välja selgitada nii palju muistiseid kui võimalik (et nende avastamise oht raudtee ehitamise ajal oleks minimaalne) ja (b) kontrollida põhjalikumalt neid u 40 kohta, mis selgiti välja I etapil kui potentsiaalsed alad, kust võiks leida muistiseid. Samuti tuli (c) läbi uurida muistised, mis olemasoleva teabe kohaselt jäid ette raudtee ehitamisele, nagu mõned kaitsealused lohukivid ning kivilalme Alu mõisa lähedal.

Enne välitööde algust tutvutti põhjalikult Eesti Maa-ameti ja Google Mapsi kaardiserverites elevate füüsилiste ja ajalooliste kaartide ning ortofotodega, leidmaks nt tumeda mulla laike põldudel, taimestiku anomaaliaid kündmata aladel, vanu talukohti, teeasemeid, kiviaedu ja -varesid jms, samuti vana mikrotoponüümikat, mis võiks osutada kultuuriväärtusega objektidele. Ühtlasi selgitati välja tänaseks kuivendatud vanad märgalad, kus muistse asustuse olemasolu on vähetõenäoline. Rahvusarhiivi vanadelt (alates 17. sajandist) plaanidel ja kaartidel otsiti mahajäetud talusid, külasisid, teid, piirikive jms. Kogu huvipakkuv informatsioon kanti põhikaardile (mõõtkavas 1:20 000), mida kasutati maaistikul liikudes.

Peamine leiremetod oli pöllulkond; kohtades, kus see tarvilik oli, sondeeriti pinnast mullapuuriga või kaevati prooviaugud. Metallioticsaid kasutati vanade talukohtade, võimalike kalmistute, lahingupaikade ning lohukivide ümbruse uurimisel. Kontrolliti kõiki positiivseid pinnavorme, et selgitada, kas need sisaldavad vanu rajatisi; samuti vaadati üle kõik suuremad rändrahnud, et leida inimtegevuse jälgi (lohud, piiritähised jms). Kõik avastatud muistised ja kaevatud prooviaugud kirjeldati, pildistati ning kanti GPS seadme abil kaardile. Välitööde detailised aruanded esitati tellijale 2015. aasta detsembris.

Töö käigus käidi jalgsi läbi kogu trassikoridor Tallinnast Iklani ning selleks moodustati neli uurimisrühma. Uusi muistiseid avastati siiski suhteliselt vähe. Pärnumaal (rühma juhataja Aivar Kriiska) leiti seitse fossiilset pöllujäärist, mis eristuvad kas pöllukivihunnikute või mattunud organiikarikka pinnasena, ning mitu kiviaeda, piiritähist ja taluaset. Raplamaa osas (juhataja Andres Tvaauri) avastati seitse rühma kokku vähemalt 48 pöllukivihunnikuga, mis trassi rajamisele kindlasti ette jäädavad. Lisaks pandi seal kirja ka üks töenäoline lohukivi, üks piirikivi, üks taluase 17. sajandist ning paar kiviaeda – ka neid objekte tuleb enne tee-ehitust kaevata. Harjumaal tuli läbi käia kaks trassivarianti, sest projekti alguseks ei olnud nende vahel veel lõplikku valikut tehtud. Idapoolsel lõigul (juhataja Gurly Vedru) uusi muistiseid peale ühe vana talukoha ei tähdeldatud, kuid läänepoolsel (juhataja Aivar Kriiska) avastati kolm uut lohukivi ning ühe kaitsealuse lohukivi ümbruses kiviaegne asulakoht, täpsustati ühe rauaaegse asulakoha (nr 18828) piire ning leiti mõned pöllujäärist ja üks asulakoht.

Arheoloogilised väljakaaevamised viidi läbi Alu kalmel (nr 12155; kaevamisi juhatasid Margot Laneman, Valter Lang ja Ragnar Saage), kus hilisema pöllukivide kuhjatise all avastati kaks matust eelrooma rauaajast. Samuti kaevati nelja lohukivi ümbrust Harjumaal ning osaliselt vastavastatud nöörkeraamika kultuurist päri-nevat asulakohta ühe sellise lohukivi ümbruses Soodevahel (juhatasid Andres Kimber, Kristiina Paavel ja Aivar Kriiska). Nende kaevamiste tulemuste kohta on nimetatud autorid koostanud pikemad käsitlused, mis ilmuvald käesolevas kogumikus.

Kokkuvõttes võib nentida, et Rail Balticu trass kulgeb (esi)ajaloolise kultuurmaastiku ärealadel ja selle ehitamine töenäoliselt ei too kaasa väga suuri kahjustusi meie kultuuripärandile. Tööde kavandamise viisi Tehnilise Järelevalve Ameti poolt võib pidada eeskujuks seesugustele suurtele projektidele: anti piisavalt aega ja ressursse eeltööde ning maastikuleire ja esimeste väljakaaevamiste läbiviimiseks. Avastatud muististe põhjalikum uurimine jäab edasiseks ülesandeks.