



8th International conference (AIG) on
Geomorphology

ABSTRACTS VOLUME

PARIS - 2013

27-31 august

*« Geomorphology and
sustainability »*

www.geomorphology-IAG-paris2013.com



ACKNOWLEDGEMENT

The Organizing Committee would like to thank its partners for their support

Institutional partners



INEE



Bronze Partners



Other Partners



Radiocarbon Dating

Consistent Accuracy
Delivered On-Time

Beta Analytic Ltd.



WILEY

Réalisé avec l'aide du Ministère de l'Enseignement supérieur et de la Recherche
Action soutenue par la Région Ile-de-France (08 10 18 18 18)

Destructive abrasion processes of archaeological site Ostolopovskoe

GAYNULLIN I.(1), USMANOV B.(2)

(1) Sh. Marjani Institute of History, KAZAN, RUSSIAN FEDERATION ; (2) Kazan Federal University, KAZAN, RUSSIAN FEDERATION

The problem of archaeological heritage conservation is highly relevant for the Republic of Tatarstan (RT), Russia, because most of archeological sites from the Mesolithic to the late Middle Ages, situated in the coastal zone which is due to the nature of human life in the past and 75% of the Kuibyshev reservoir shores and more than 290 km of small rivers shores in RT affected by dangerous exogenous processes.

Complex of monuments in question - Ostolopovskoe hillfort, Ostolopovsky burial and Ostolopovskie Settlements I and II - located on the shore of the Kuibyshev reservoir at the mouth of Shentala river (Alexeevsky District RT). Comparison of topographical maps and results of remote sensing data interpretation, using GIS technology allow to estimate the rate of hazardous processes and, thus, to determine the risk of destruction of the monument. The displacement of coastline (1958-2005) studied with the help of multi-temporal remote sensing data. The distance of coastal retreat varies from 0.75 to 1.4 m per year. Archaeological site Ostolopovskoe Settlement I, is mostly destroyed by permanent abrasion processes. During the study period the area of 2.74 hectares washed away, cultural layers were destroyed, maximum displacement speed is 1.4 m per year.

Cultural heritage sites monitoring, with information about the chronology, cultural layer value, settlement specifics, etc., taking into account the remote sensing methods used in landscape ecology and field archaeological survey, allows to evaluate damage and the intensity of archaeological sites destruction through the dangerous exogenous processes estimation.

Geoarchaeology in Cantabrian Mountains (NW Spain): human activity prior to Roman occupation in the Roman Camp Site of Via Carisa?

JIMENEZ-SANCHEZ m., DOMÍNGUEZ-CUESTA M.J., FARIAS P., FERNANDEZ-VIEJO G., RODRIGUEZ-RODRIGUEZ L., OLONA J., BALLESTEROS D., NAVES B.

department of geology, university of oviedo, OVIEDO, SPAIN

A geoarchaeological research (funded by PC10-14 Project, FICYT-Rioglass S. A.) was carried out in the Roman Camp Site of Via Carisa. The relevance of this site comes from its interpretation as a major military camp (*castra aestiva*) built in a mountain environment (1,728 m.a.s.l.) under the legate of Publio Carisio (about 26-22 a BC). The site is close to Via Carisa, a strategic historical path between the Cantabrian Coast and the interior of the Iberian Peninsula. The research aims to establish the interaction between human activity and landscape in a complex mountain environment, by combining geomorphological mapping, geophysical research (multi-technique geophysical research with seismic refraction and multichannel analysis of surface waves methods), core sampling and AMS radiocarbon dating. Landscape features result mainly from fluvial and gravity action, being outstanding the occurrence of large ancient landslides reworked by human activity and partially occupied by the Roman Camp. Several small bogs right on top of the landslides are interpreted as artificial closed structures of unknown age, subsequently filled by a sedimentary sequence, which was sampled with seven hand drill cores. Deogracias-1 core (202 cm deep) located at 1,248 m a.s.l. is composed by alternations of clay, silt and sands (interpreted as waste activity in a pond) and a unit of gravels embedded in a clay matrix (interpreted as colluvial deposits). Radiocarbon data shows that the pond infill would have extended from 2,550 ± 30 yr BP (cal BC from 800 to 570 yr) to 2,410 ± 30 yr BP (cal BC 730 to 400 yr). The results suggest that human occupation is prior to Roman times, reinforcing the strategic significance of Via Carisa as a historic pass across the Cantabrian Mountains