

VOLUNTEER CAMPS IN KAZAKHSTAN IN 2022

During the summer and autumn of 2022, the Laboratory of Geoarchaeology (Historical Faculty, Al-Farabi Kazakh National University) is organizing archaeological investigations covering all periods from Palaeolithic to Modern times all over Kazakhstan. The work program consists mainly in mapping, documenting and collecting paleodata for analyses. Open-air lectures in the history, archaeology and paleoenvironment of Central Asia are included. Sessions will take place between June and October 2022 and are 15 days in duration. Volunteers and students of archaeology are welcome to join us. The participation fee is EU350 (or 380USD) per week and academic credit is given by the Kazakh National University. Interested volunteers and students of archaeology should contact the LGA to ask for full details on the various survey and excavation opportunities on offer.

Renewed information is also available on the Laboratory of Geoarchaeology web site:

<http://www.lgakz.org/VolunteerCamps/Volunteer.html>

Or you can check the updated announcement of our volunteer camps on the [Fieldwork webpage of the Archaeological Institute of America](#)

There will be 4 expeditions occurring between June and October 2022, the exact dates are not firmly fixed and will be decided according to the grouping of volunteers at fitting dates.

They will occur in 2 different regions of south Kazakhstan, each made of 2 sub-regions, all together summing up 4 survey areas:

- 1) Lower Chu river inner delta (Geoarchaeological study), session at the proposed date of 15-29 June 2022**
- 2) Southwestern Moyinkum desert, lacustrine oases of farms (Geoarchaeological study), session planned for the date of 18 July-2 August 2022**
- 3) Syr Darya delta (upper Kuvan Darya), Zhetyasar urban oasis (Geoarchaeological study), session planned for the date of 29 August-12 September 2022**
- 4) Aral Karakum desert (Geoarchaeological study), 2 sessions at the proposed dates of 05-20 September or 1-15 October**

Application Deadline: Not applicable

DOCUMENTATION OF LAND AND WATER USE IN DESERT DELTAS OF SOUTH KAZAKHSTAN

Director:	Renato Sala
Site/Period:	Early Iron, Turkic, Medieval, Modern times
Volunteers:	5
Experience required:	No previous experience necessary
Excavation dates:	4 sessions at the proposed dates of: 15-29 June, 18 July-02 August, 29 August-12 September, 05-20 September or 01-15 October 2022
Application deadline:	ASAP
Minimum stay:	Two weeks
Cost:	EU350 / week
Fare:	Not included
Accommodation:	Provided
Food:	Provided (vegetarian and non-vegetarian)
Vaccination:	Anti-tetanus recommended
Passport/visa:	Valid passport; for visa contact organizer 4 weeks in advance.

From the start of the Holocene, river deltas in deserts have always constituted privileged ecological niches for animals and men. Riverine forest and meadows represent vital winter residence for both wild ungulates and domesticated livestock and spring and summer floods offer to human communities the possibility to practice irrigated agriculture. During summer, the deltas are partially depopulated from their occupants moving to cooler places.

In Kazakhstan, the earliest urbanization occurred in the form of castle-farms among agro-pastoral societies in the delta of the Syr Darya during the 1st millennium BC (Zhetyasar culture, 3 BC- 9 AD) and during medieval times (7-12 AD) all the deltas got intensively urbanized (Syr Darya, Arys, Talas, Chu and Ili rivers).

Deltas are very sensitive to natural and anthropogenic pressures so that their morphology and hydrological regime is in constant change from flooding to desiccation. According to water availability (climatic, hydrological and anthropogenic conditions) and socio-economic trends, large portions of these deltas have switched during historical times from phases of dense population to abandonment and from periods of semi-settled to semi-nomadic agro-pastoralism.

For evaluating the respective role of these factors, our research uses a threefold approach based on paleoenvironmental, archaeological and ethnographical analyses applied to 2 representative deltas where phases of occupation and abandonment are historically documented. Moreover, the same multidisciplinary research will be implemented for the study of the adjoining deserts of these deltas where some wet areas constituted a complementary and vital seasonal residence (especially in summer when deltas are torrid and infected by insects) for the delta population.

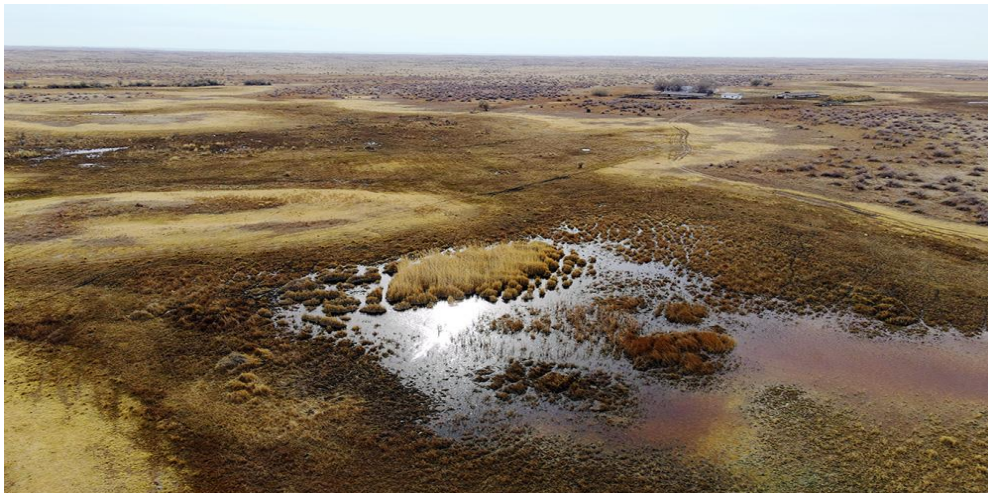
1- LOWER CHU INNER DELTA AND EASTERN MOYINKUM DESERT

The Inner delta of the lower Chu river is a segment of 150 km where the main course, turning northwest, forks in many branches rejoining downstream. This area represents a convenient agro-pastoral region, with short distances between desert, riverine forest and mountain meadows. It is made of different environmental zones, each playing a vital role in the seasonal land use of the region, the alluvial plain with settlements and irrigated fields, the Moyinkum desert in the south, the saxaul steppe and the Chu-Ili mountains in the north. During the medieval times (7-12 AD), 20 medieval towns were active on the floodplain of the right bank and at the turn of the 19-20th centuries, the population consisted of semi-settled farmers socio-economically organized along irrigation channels providing enough flour for satisfying domestic needs. Their farmlands corresponded to only 1% of the potential and historically irrigated surface of the right bank where are located abandoned settlements and irrigated fields that will be the focus of our research.

The Moyinkum is a huge sandy desert mostly located in the Zhambyl province of South Kazakhstan. It represents an area of 40,000 km² with a longitude of 500km by 150km latitude. In the north and east, the desert is bounded by the valley of the Chu River and in the south and west respectively by the Kyrgyz Alatau (Tianshan) and Karatau mountains. The desert is composed of marine sediments and alluvium of the Chu River delta.

The eastern part of the Moyinkum (25,000 km²) is the most used by animal husbandry farms and consists of a northern part made of a 15-30 km wide ridge-hilly plain with saxaul vegetation (shrubs), a central part with high sandy ridges (50-70 meters) and, most important, inter-ridge depressions where groundwater surges on surface forming a chain of lakes crossing longitudinally the desert. This wet band made of gray-brown soils hosts a rich vegetation with meadows, shrubs, trees and ephemeral plants attracting stockbreeders all year round and herders from the Chu delta especially in summer.

This area has never been archaeologically investigated and will be surveyed during the summer 2022.



Dolankuduk lake in the eastern Moyinkum desert

2-UPPER KUVAN DARYA DELTA AND ARAL KARAKUM DESERT

Among the delta branches of the Syr Darya delta, the Kuvan Darya has hosted major agro-urban cultures of Kazakhstan starting with the earliest, the Zhetyasar culture (III BC - IX AD) and, after a hiatus of more than one millennium, the Karakalpak (XVII-XVIII AD) and Kazakh (XIX AD) occupations. According to water availability and its cultural management, economy switched from semi-settled to semi-nomadic agro-pastoralism.

For dominantly stockbreeding-based communities, the Kuvan Darya was inhospitable during summer and therefore required complementary seasonal pastures in the Aral Karakum desert located north on the right bank of the lower Syr Darya where most of the Kuvan Darya herders were moving with their herds in historical time. The convenient seasonal complementarity of the Syr Darya delta and the lower Turgai depression where is located the Aral Karakum desert attracted in both areas wild and domesticated ungulates and men from Neolithic hunters-gatherers to Bronze, Iron Age and medieval semi-settled herders. The mid-upper course of the Kuvan Darya environmentally and hydrologically unsatisfactorily researched and the Aral Karakum desert, archaeologically undocumented, will be the focus of our research.



Syr Darya delta, desiccated riverbed

Fieldwork will be directed by specialists from the Laboratory of Geoarchaeology. During this survey, the camp will be nomadic.

The geoarchaeological approach used during our fieldwork documentation consists in the application of **methods** belonging to Quaternary geology and environmental archaeology to which volunteers will be introduced and trained. It consists in documenting natural landscape formation and its historical evolution (geology, geomorphology, hydrology, stratigraphy, soils and vegetation), in mapping cultural landscape through remote study and fieldwork survey (archive material, cartographic and aerial photography, site documentation, statistical and diagnostic analyses of surface findings and monuments) and in gathering through archive material and live interview with local population basic information about land and water use.

Archaeological trial trenches in strategic locations and geological trenches for palynological analyses will be implemented.

The weather is extremely dry. Volunteers should bring a sleeping bag, a mat, a sweater, some strong shoes and a flashlight.

Useful reading

L.Chermak 1900. *Osedlye Kirgizy-zemledeltsy na r.Chu* [Settled Kazakh farmers at the river Chu], Omsk [in Russian]

S. Robinson et al. 2017. Pastoralists as Optimal Foragers? Reoccupation and Site Selection in the Deserts of Post-Soviet Kazakhstan. *Human Ecology* 45: 5-21

B. Andrianov (S. Mantellini, Ed.) 2016. Ancient Irrigation Systems of the Aral Sea Area. The History, Origin, and Development of Irrigated Agriculture. Oxbow books.
Tolstov S.P. 1962. Po drevnim deltam Oksa i Yaksarta [Following the ancient deltas of the Oxus and Yaxartes]. Moscow: izd.Vostochn.Literat.
Vainberg B.I. 1999. Etnogeografiya Turana v drevnosti. Moskva: Vostochnaya literature.
R.Sala, Historical survey of irrigation practices in west Central Asia (link: <http://www.lgakz.org/Texts/LiveTexts/CAsiaIrrigTextEn.doc>)

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