

***ROCA DELS BOUS  
ARCHAEOLOGICAL PROJECT  
(Sant Llorenç de Montgai)***



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**Roca dels Bous Archaeological Project 2014 (RBAP-14)**  
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Dear Prospective Participant:

We appreciate your interest in participating in *La Roca dels Bous Archaeological Project* for the further coming season.

This web page will provide you a description of the basis of the scientific project that we are developing during the last years in this archaeological site, and important logistical information. Please, you should read carefully in order to understand what our proposal is and to aid you in taking the decision to apply for this programme.

If you decide to participate, please contact with us as soon as possible. The project staff needs to review all forms in order to ensure a successful team effort in advance of the starting date.

Please examine carefully the conditions and the specificities described in the application form and if you have additional questions please contact us by e-mail.

Please feel free about contacting us for any concerns related with any aspect you do not understand in the web page.

We look forward to hearing from you

Sincerely

Rafael Mora

Adrià Millán

Xavier Roda

Please all correspondence to: [programs@archaeobarcelona.com](mailto:programs@archaeobarcelona.com)

## **Neanderthals of La Roca dels Bous**

**(La Noguera, Catalunya, Spain)**

### **LA ROCA DELS BOUS ARCHAEOLOGICAL PROJECT (RBAP 2014)**

Neanderthal's extinction in Europe is an archaeological hot topic that has generated great interest in recent years. Nowadays, there is intense debate about whether it is possible to demonstrate the coexistence of Neanderthals and the "anatomically modern" *Homo sapiens*, and whether the two species ever interacted.

Archaeological evidence suggests that the Iberian Peninsula acted as a "refuge" for the retreating Neanderthal populations as they were being replaced by modern humans. Several archaeological sites in the Western Mediterranean and Portugal show that Neanderthals lived there until around 30,000 BP. In the north of the Iberian Peninsula, around 40,000 BP, a new techno-economical – and possibly social – tradition had emerged, different from the one represented by the Neanderthals. This new tradition is associated with the appearance of the *Homo sapiens*, who, it is believed, arrived in Europe from the Eastern Mediterranean and spread quickly throughout the continent.

### **PROJECT DESCRIPTION**

This project seeks to study an archaeological site in Northeast Spain that could increase our knowledge on the end of Neanderthals and their interaction with modern humans. This site is a rock shelter called La Roca dels Bous. It is located above the river Segre in the Pyrenees foothills, six miles north of the city of Balaguer and two hours west of Barcelona. This location allows easy access to the Ebro basin and entrance to the Pyrenees valleys.

Preliminary excavations performed by us found archeological materials typical of *Homo neanderthalensis*, especially flint artifacts characteristic of the middle Paleolithic. The area from which this flint was quarried has not been determined yet. We also found bones from various animals that were part of the diet of Neanderthal groups. Remains from woodlands (red deer), grasslands animals (wild horses) and rock dwellers (wild goats) are present, which suggests that La Roca dels Bous was at the nexus of different ecosystems.

One of the most interesting characteristics of this site is the role it might have played in the mobility of the Neanderthals. The archaeological floors

found had surprisingly few lithic artifacts and scarce animal remains. Layers of hearths with no apparent organization were discovered by the wall of the rock shelter. Fires appear repeatedly along the stratigraphic sequence and could be interpreted as resulting from ongoing short-term settlements. The combination of these factors suggests that small groups consistently chose La Roca dels Bous as a temporary shelter as they moved through wide areas, possibly following the migratory routes of their prey.

Several carbon-dating analyses resulted in dates around 38,000 BP. If this dating is confirmed, Roca dels Bous would stand out as a very interesting archaeological site indeed. Furthermore, it is to be noted that the samples used for the <sup>14</sup>C AMS dating were obtained from deep strata at the site. We noted that both upper-strata and more-recent strata contained Neanderthal artifacts.

The oldest Neanderthal sites known in the nearby areas date back to around 40,000 BP. And the first settlements attributed to the "anatomically modern" *Homo sapiens* in Northern Spain are dated around 39,000-38,000 BP. All this would suggest that Neanderthals could have persisted in this particular area longer than previously believed, preceding the arrival of the first *Homo sapiens* to the area.

## **FIELD METHODOLOGY**

Three major tasks will be performed:

- a) Excavation of Roca del Bous
- b) Survey of nearby areas
- c) Lab work

### **Excavation**

The goal of the excavation is the retrieval of artifacts, bones, and remnants of hearths. A work program will be established beforehand detailing the tasks and the sequence in which they will be performed during the excavation.

Participants will be trained in the specific tasks assigned to them as well as on the general objectives of the excavation. Sediments will be sifted in order to retrieve micro artifacts, seeds and micro vertebrates. Computers will be used onsite to register and process the data, with topographic instruments being directly linked to the computer system.

### **Survey**

Systematic surveys will be carried out in the vicinity of the site. The goal of the surveys is the detection of other archeological deposits from this chronocultural (Middle Paleolithic) time period. We will also search for the sources of raw materials from which the retrieved artifacts were derived.

### **Lab Work**

We consider lab work a key part of our archeology strategy. Lab work includes inventory, classification and initial study of the artifacts, animals and archeological structures found at the site. The project management will train all the participants in the study of the materials retrieved during the excavation.

Daily will discuss the activities to be performed and the results that are being obtained in order to plan for the work ahead and in order to get the participants fully involved in the project. Also, regular talks will be held in order to introduce the participants in the archeological and evolutionary meaning of the Neanderthals and to discuss the different theories surrounding this species.

## PROJECT STAFF

**Drs. Rafael Mora Torcal** and **Xavier Roda Gilabert** are co-directors of the excavation at La Roca dels Bous. **Adrià Millán Gil** is director of archaeoBarcelona.

**Dr. Rafael Mora Torcal** is coordinator and head investigator of the Studies Centre of Archaeological Heritage of Prehistory (CEPAP-UAB), he is professor at Department of Prehistory at the Universitat Autònoma de Barcelona and the ICREA-Academic Award recipient of 2009. His primary research focuses on techniques associated with lithic materials. The last projects he directed encompass the first manifestation techniques on African Olduvai sites to northeastern peninsular Mesolithic occupations. He collaborated with the Spanish team that works on Peninj (Tanzania) and directed a research project that deals with the study and review of the first stone industries recovered at Bed I and Bed II of Olduvai (Tanzania). He has also developed a geographic information system (GIS) for the collection and management of the archaeological record that brings many advantages in managing fieldwork and laboratory. He currently leads the field work in La Roca dels Bous and Cova Gran (Noguera, Lleida).

**Ma. Xavier Roda Gilabert** is FPI grant from the Ministry of Science and Innovation of Spanish Government. His Phd focuses on the study of percussion tools of hunter gatherers in the late Pleistocene and early Holocene in the peninsular northeast. He is the co-director of the field work of the Middle Paleolithic site at La Roca dels Bous (Noguera, Lleida).

**Mr. Adrià Millán Gil** is the director of archaeoBarcelona. He has been coordinator of conferences in the Program of Cultural Management (University of Barcelona) and is a member of the LABPATC (Laboratory of Heritage, Creativity and Cultural Tourism)-University of Barcelona. He was also a member of CEIPAC research team from University of Barcelona, and worked in the laboratories of Ancient History and Prehistory Archaeology, and Medieval Archaeology at the University of Barcelona. He also worked in the Archives of the City of Barcelona, and with the Territorial archaeologists of Barcelona. Adrià has years of experience with shipwreck and land-based archaeological excavation in Italy and Spain. He has excavated Prehistoric, Roman, Medieval and Modern archaeological sites.

## **ACADEMIC CREDITS**

You should consult it with an academic advisor and the Registrar's Office at your college or university. Tell your advisor to contact us, we will talk to him/her. Each institution has its own policy giving credits. Normally we carry out a continued and personalized evaluation for each student and a final exam given by the university professors of the research team. At the end of the program we will give you a certificate from Universitat Autònoma de Barcelona and the research group for your participation.

In past seasons, many students have applied to their Department doing extra academic credits related to the participation in this fieldwork. If you need additional information for applying to your Department, we can help you sending references or the information that your university demand about this program.

## **ROLE OF THE PARTICIPANTS**

Team members will participate in the excavation and recovery of artifacts and structures. Tasks include documenting the archaeological remains by drawing maps and taking photographs, while lab activities will include developing strategies of recovery and sampling, building a catalog of recovered materials, and discussing and interpreting the finds.

## **PHYSICAL DEMANDS OF THE PROJECT**

The physical demands of the project are a little bit strenuous, however, there is a roof on the archaeological site, so the excavation will take place in the shadow. The place is very warm during summer, and sun might be strong. It is very important you do not forget to bring a powerful sun cream and others protect systems.

## **SAFETY GUIDELINES**

Archaeological fieldwork involves some level of risk; one part of this may come from chance events that are unpredictable and little can be done about it; another part of the risk, however, can be greatly reduced by awareness of hazards and good judgement based on experience. Persons undertaking field work must assess the risk, as far as possible, and this will vary in accordance with weather, experience, age, fitness and other characteristics of the persons. In providing field guides no person or recommended here to undertake archaeological field work in any way that might involve them in unreasonable risk.

Individuals should carefully consider the safety aspects on the occasion of their visit and in bad conditions be prepared to cancel or modify part or all of the fieldwork activities. archaeoBarcelona give you a liability insurance in case of accident during the program activities. You must hire your own medical and illness insurance in your country; we cannot hire this from Spain. We recommend hiring insurance for loss of baggage.

## **HOST COUNTRY PARTICIPATION**

Local students of archaeology from universities throughout Spain and nearby countries will assist with the project. It is hoped this project will become a cornerstone of a greater future project whereby the area is designated a national park.

Archaeological site is near to the village where we will be living. Every day we will go and come walking. The distance between the house to the archaeological site is around 10 minutes. The site is located in a small cuesta (slope), moderately sharp and sloped but after one or twice visits to the site, you will feel secure. It is not necessary the use of climbing devices or similar things for any situation.

The archaeological project will be developed in a small village, Sant Llorenç de Montgai, in which usually only live retired farmers. The social environment is familiar and the normal reaction of the local people is very friendly and trying to welcome and help you.

## **PROJECT AREA**

La Roca dels Bous is located in the pre-Pyrenees mountain ranges, near to the town of Balaguer. Access to the archaeological site is good, but the landscape is quite rugged with deep ravines and sheer cliffs. With its deciduous trees, the vegetation is a good example of the Mediterranean forest, with fauna typical of the Mediterranean ecosystem like wild boar, fox, and roe deer. The project site is located in a natural refuge for aquatic and migratory birds, and so bird watching in the area is excellent.

Nearby towns and monuments offer numerous opportunities for sightseeing and for understanding the history of the region. In fact, the pre-Pyrenees demarcated the border between the Christian kingdoms and the powerful Islamic kingdom known as the Qura of Lleida, at the middle Ages.

Nearby Balaguer is a small town featuring an impressive castle and a ruined Islamic *ciudadela*, which is one of the most important of its kind in Catalonia. The city of Lleida is a 30-minute train ride from Llorenç de Montgai, and is a monumental city with a well preserved medieval quarter. Other easy excursions include the inner valleys, which boast beautiful Romanesque churches having Middle Age classic artistic representations. Ordesa and Aigues Tortes National Parks are a two hours away. More information about the area can be found at:

- <http://www.pirineu.com/>: General introduction of the Pyrenees (Spanish)
- <http://www.museucn.com/>: Information about Balaguer (English and Spanish)
- <http://www.lleidatur.es/ing/>: General information about nature of Lleida (English)

## **PROJECT CONDITIONS**

## **Weather**

**Temperatures in summer are high.** Hats and sunscreen are strongly recommended. Nights can be chilly so warm clothing is advised. Summer storms occur occasionally. The best footwear is a comfortable and not rigid shoes (please not rocky boots). Segre River is perfect for swimming in the hot hours during the day.

## **Housing**

We have arranged lodging in a hostel equipped with modern facilities. Sleeping bags are not necessary but if you prefer you can bring with you.

## **Meals and Food**

Lunch and dinner will be provided by the project management, with accommodations for vegetarians.

## **Conditions at the Project Site**

We will be lodged in a hostel with bathroom and showers. It has washing machine, however you will have to pay it apart. All team must participate to put table and clean dishes; and all team must clean common shared spaces (living room, bed room and the yard).

## **ANTICIPATED WORK DAY**

|                          |  |
|--------------------------|--|
| 7:30-8:45 am             | Wake up and breakfast                                    |
| 9:00am-1:30 am           | Briefing, field work at the site or surveying the region |
| 2:00-3:30 pm             | Lunch  |
| 3:30-6:00 pm             | Field work or lab work                                   |
| 6:00-7:00 pm<br>next day | General meeting, discussion of activities for the        |
| 7:30-9:00 pm             | free time  |
| 9:00 pm                  | Dinner   |

This is a provisory schedule and it will be modified in function of particular situations (as visits others cultural, archaeological or paleontological places)

One day every week will be a free day.

## **HEALTH INFORMATION AND REQUIREMENTS**

### **Immunizations**

There are no required immunizations for Spain. Booster shots for tetanus are recommended.

## **Current Health Precautions**

For the most current information available regarding health precautions when traveling to Spain, please contact your physician or local health clinic. And, as with any health-related recommendation, you should check with your personal physician regarding the shots and medications that are best for you.

Maximum safety measures against the sun must be taken, specially people with very white skin. Solar filter with high protection factor, comfortable wear and other protective measures are highly recommendable for prevent moderate but very possible insolations.

It is highly recommend you bring anti-diarrhea pills, analgesics and other drugs only for precaution. Anyway, always it is possible to buy in Balaguer's druggstore.

## **Medical Insurance**

U.S. medical insurance is not always valid outside the United States. Uninsured travellers who require medical care overseas can face extreme difficulties. Check with your insurance company to confirm whether your policy applies overseas, and whether it provides for medical evacuation.

As certain whether payment will be made to the overseas hospital or doctor or whether you will be reimbursed later for expenses you incur. Useful information on medical emergencies abroad, including overseas insurance programs, is provided by the Department of State's Bureau of Consular Affairs brochure *Medical Information for Americans Traveling Abroad*, available via the Bureau of Consular Affairs Web site.

## **Personal Medication**

Bring all personal medication including aspirin, bandages, first-aid cream, tissues, and tampons. If necessary, you can buy over-the-counter medications in the area. If you wear glasses, be sure to bring an extra pair.

## **Medical Facilities**

Spain has an excellent health care network. Balaguer's main hospital is 10 minutes from the site, and Lleida's General Hospital – one of the best health-care facilities in Catalonia – is 20 minutes away by car. Free health assistance is provided upon presentation of passport.

On rare occasions, an emergency may occur that necessitates the administration of prompt medical care, hospitalization or surgery. In the event of injury or illness, you hereby give permission to the RBAP staff project to secure treatment including surgery and administration of

antibiotics, immunizations, anaesthesia and other medications as professional judgement dictates in the event.

## CURRENCY

Money can be exchanged at banks and at the airport. Please make two sets of copies of traveller's check receipts, your passport, and of the fronts and backs of your ATM and credit cards. Leave one set at home with someone you can call in case of an emergency. Take the original traveller's check receipts with you as well as the other set of photocopies of the cards and passport, keeping them separate from your traveller's checks.

## ENTRY REQUIREMENTS TO SPAIN

A passport is required for entry to Spain. A visa is not required for tourist or business stays up to 90 days. For further information concerning entry requirements, travellers contact the Embassy of Spain

*Please indicate **tourism** as your reason for travel on your visa or other forms.*

We recommend you make photocopies of your passport and airline tickets placed them separately from the originals to prevent it would be lost or stolen.

## RECOMMENDED TRAVEL TO SPAIN

Participants are responsible for arranging their own travel to and from the assembly point and for informing us of their travel plans one month prior to the beginning date of the project session to which they have been accepted. Ultimately the arranging of travel plans is up to the individual participants.

Airline prices vary widely, however, so contact your travel agent to get the best prices.

## SUGGESTED ACCOMMODATIONS FOR PARTICIPANTS WHO ARRIVE EARLY

If you need accommodations before the project, please, let us know. We can provide different address. Otherwise, Barcelona is a very important tourist place, and it is easy to find travel guides with good ideas about lodgement and things to do. We recommend you visit the following web [www.barcelonaturisme.com/turisme/home2.htm](http://www.barcelonaturisme.com/turisme/home2.htm).

If you are in Barcelona, at Catalunya sq. (BCN's downtown) you will find the Barcelona Office Tourist with an interesting number of places with different prices.

## ASSEMBLY POINT

Provisory Place: Lleida-Pirineus train-station. Connection from Barcelona to Lleida by train is direct in the most important RENFE train station

(Barcelona-Sants, Barcelona-Paseig de Gracia, Barcelona-Pza Catalunya). For more information, please visit [www.renfe.es](http://www.renfe.es)

We will confirm the assembly point a few weeks before the program.

## **TRAVEL FROM THE ASSEMBLY POINT TO THE PROJECT AREA**

Drive by car from the assembly point to the project area is about half hour. Transportation between the Lleida-Pirineus RENFE and the site will be provided by project management.

## **WEEK IN BARCELONA AND THE CONCLUSION OF THE PROGRAM**

archaeoBarcelona staff will provide the return to Barcelona in function with the schedule of the different session.

Transportation and returning will be provide the archaeoBarcelona and RBAP-2014 staff, but **in particular situations previous appointments can change** in function of general interests of the project and/or participants. In these situations, staff will provide alternatives for arrive to the site or for return to BCN.

After the cultural tours in Barcelona, the participants will receive from archaeoBarcelona the guidelines about how to come back to Barcelona's airport.

## **ACOMMODATIONS**

Accommodations for the project are covered through the last night of each session.

## **PROGRAM COST**

**3.150 € (\$4.290 aprox)** room, board, transport from Barcelona to Sant Llorenç de Montgai and from Sant Llorenç de Montgai to Barcelona, conferences and seminars, academic evaluation, workshops, accident insurance, cultural tours in Barcelona, ticket for Casa Milà, Sagrada Familia, Park Güell, Picasso Museum and Centre cultural el Born.

## **SCHEDULE of PAYMENT**

To reserve a space, you must pay an application fee. The remainder of the balance can be done till 30 days before the start of the program. If you apply to both programs, the application fee for the second one will waived. Application fees will be refunded if the applicant is not selected.

## **CANCELLATION AND REFUND POLICY:**

- Before than 30 prior to start the program: Application fee non refundable. The balance is refundable

- Less than 30 days prior to start the program: all payments are non-refundable