

This chapter and the next six provide you with information on how to set up an excavation project. This workbook and the CD-ROM will take you through a series of topics and exercises designed to teach you the basics of planning a field project. You will learn how to write a research design, place excavation units, decide what methods of artifact recovery and proveniencing you will use, choose your project personnel, deal with logistical concerns, and develop a project budget. These are steps you will take in planning any field project, but we have used examples from our work at Combe-Capelle to illustrate how a field project is put together. The importance of setting up your field project cannot be overemphasized, as it sets the stage for how you will excavate and what data you will recover during excavation.

Eventually you will design your own virtual project, excavate the site, and analyze the data you recover to answer research questions you develop during the setup phase. The ultimate goal of these chapters is to prepare a proposal to excavate Combe-Capelle in order to answer your research questions and to come up with a budget that will be approved by our virtual funding agency.

WHAT IS A RESEARCH DESIGN?

A research design is essentially a guide to fieldwork. It is the plan that you follow as you set about doing a field project, and it guides the fieldwork, the analysis, and the write-up. The basis of your research design is a set of research questions to be addressed during fieldwork and analysis; these questions help you determine where to dig, how to dig, and what types of analyses to perform. The research design can also be used as a planning document for determining the length of the field season, the size of the crew, and, hence, the budget.

Keep in mind that each archaeological site is unique and is destroyed during the process of excavation. Therefore, in addition to addressing specific research questions, you need to document as much information as



possible and to be thorough in your collection of material so that it is available for future research. It is also important to remain flexible when developing your research design, especially if you are going to be working in an area that is unknown to you. The research design can and should be modified continually as fieldwork progresses and more information is obtained.

FORMULATING A RESEARCH DESIGN

You should take two important steps in order to develop a successful research design: conduct background research and obtain necessary permits and permission to excavate.

Background Research

The first step is to conduct background research on the site, the area in which you will be working, and the theoretical problem you will address. The background research should include a relatively detailed literature search on what has been done previously at your site and in areas that are similar to the one you are working in. You should also research the general topic you will be addressing with your research (in this case, the Middle Paleolithic). This information can come from archives, published archaeological reports, contract archaeology reports, historic documents, or museum collections.

Information on the site environment should be obtained as part of your background research, including information on the present-day environment (for planning the logistics of the fieldwork) and the paleoenvironment. You should obtain information on floral and faunal resources, topography, geology, and water. Floral and faunal resources can provide you with information on the availability and diversity of food sources; the topography may have dictated where a site was located or may have provided certain constraints on site size; the geology can tell you about the potential for buried deposits, the preservation within those deposits, whether the remains you will encounter are intact or disturbed, and the availability of lithic source material. Water was a critical resource to prehistoric and historic groups, and most archaeological sites with evidence of habitation or camping are found near water sources. The location and nature of water sources will be important in helping you determine what a site was used for.

Permits or Permission to Excavate a Site

The second step you should take before writing your research design is to obtain permission to excavate the site. If the site is on private land, you should obtain written permission from the landowner. If it is on public land, you should apply for a permit from the applicable public agency (for example, the U.S. Bureau of Land Management or the U.S. Forest Service). In most cases, government agencies require a research design as part of the permit application; you should inquire about their requirements before you write your design or plan your project. If you are working in the United States, you should also consult with any Native American groups that are in the area or claim ancestry to the site, so that they can be involved in the formulation of the research design and fieldwork strategy from the beginning. According to the 1990 Native American Graves Protection and Repatriation Act, before you excavate on federal land you must con-

sult with Native American groups claiming cultural affiliation to prehistoric remains concerning what should be done if human remains are encountered during excavation. Many states have similar laws covering state land.

WRITING A RESEARCH DESIGN

The research design should be written in a concise, easy-to-understand format. The following items should be included in your written research design:

- Summary of background research describing the site, previous archaeological work at the site or in the vicinity of the site, and the environment or paleoenvironment.
- Detailed research questions (hypotheses) that can be answered during fieldwork. It is also useful to specify the types of information you will need in order to answer these questions, and you may want to explain why the particular site you are excavating is a good candidate for answering the research questions you have developed.
- Description of your field and lab methods. How will you get the data? How will they be analyzed? You should include information on your excavation strategy (excavation units, proveniencing, screening), what you can learn from the kinds of analyses you plan to do, and what kind of samples you will be taking to send to specialists (for example, pollen or dating samples). You should include a discussion of your plans for dealing with human remains in this section, if applicable.
- Schedule for completion of the fieldwork, analysis, and final report. This is often referred to as a scope or plan of work.
- Budget for conducting the field project.

RESEARCH DESIGN AT COMBE-CAPELLE

At Combe-Capelle we relied on archival documents from Ami's excavations at the site and examined artifact collections from these projects that were housed in museums in France. We also read literature published on Paleolithic sites in the Perigord region, on the Paleolithic of France, and on the Middle and Upper Paleolithic in general to help us develop our research questions and plan our field project. We examined the available paleoenvironmental data for the region around the site and consulted with specialists familiar with the geology and climatic history of the area. Authorization for our excavation came from several sources. Because the site was on private land, we had to get authorization from the property owner. We also had to get permission from the regional director of antiquities and the French Ministry of Culture.

We addressed two basic research questions during our work at Combe-Capelle. The first question concerned the typological sequence of industries at Combe-Capelle. When Ami excavated the site, he found an industrial sequence of assemblages that did not match those observed at other Middle Paleolithic sites in the area, a fact that made Combe-Capelle unique (see Chapter 3). We wanted to obtain a sufficient sample of stone tools from the stratigraphic levels at Combe-Capelle to determine the sequence of lithic industries.

The second question concerned how raw materials were used at Combe-Capelle. The site is located on a source of high-quality flint, which enabled us to examine the influence of raw material availability on lithic technology and typology. We were specifically interested in determining if Combe-Capelle had been used as a quarry site.

Suggested Readings

Binford 1964; Struever 1971

EXERCISE 4.1

Defining Research Questions for Your Virtual Project

To start your virtual project, you will need to come up with research questions that you will attempt to answer by excavating Combe-Capelle. For each question, discuss briefly why you would want to know the answer and what kinds of data you would need to answer the question.

After you have shown these questions to your instructor and they have been approved, you will use them to guide your excavation and analysis.