



# GUIDE FOR SCIENTISTS / BIOLOGISTS COLLABORATING WITH BIOSPHERE EXPEDITIONS

## TASKS FOR BEFORE, DURING AND AFTER THE EXPEDITION & REPORT WRITING

Biosphere Expeditions is a volunteer organisation that runs expeditions for the growing number of people who would like to do something active towards wildlife conservations. Volunteers are usually from Western Europe, North America, Australia/NZ, between 17 and 75 years old, highly motivated, with above average education. About 10% have some sort of biology background, but they are not usually trained in survey techniques. Volunteers do NOT need luxuries and basic field conditions are usually acceptable. They DO need projects where they can do useful work and are kept busy with tasks that are directly connected to wildlife conservation.

Biosphere Expeditions has the following priority ratings: **Safety** (of the expedition team), **science** (the main aim of the expedition will be to conduct the research), **satisfaction** (whilst conducting the research Biosphere Expeditions will aim to provide a pleasurable and memorable experience for its volunteers).

### Pre-expedition

You should prepare a full **research proposal** (see separate sheet on how to write a research proposal) detailing the tasks the volunteers are going to be doing, when, how, and how long for during the day or night. The plan should show clearly which tasks are to be performed when and how much time will be spent working each day or night. The plan should also contain information on why tasks have to be performed, how the work of the volunteers is going to be used and make a difference to the research project.

Biosphere Expeditions always sends an expedition leader with the volunteers. The expedition leader stays with the expedition for its duration and is there to manage volunteers, control quality, support the field worker, and deal with problems as and when they arise so that the field worker may continue to work as freely and unencumbered as possible whilst at the same time benefiting from the extra manpower. Your **research proposal should contain a clear indication of how you would like the expedition leader to assist you**. During the expedition you should employ the expedition leader to your advantage **whilst realising that s/he is in overall charge**.

You should also prepare data entry sheets where necessary and prepare to answer lots of background questions. Generally volunteers are keen to find out as much as possible.

Finally you should prepare a talk (preferably with pictures, supporting papers or slides) of up to an hour's length to give to each team of volunteers when they first arrive. This talk should give them some background information on the research project, an outlook on what they are going to be doing and why, how their presence makes a difference to your work and what is going to happen to the data collected during the expedition and once the volunteers have left. The more information you provide, the better, and the more motivated the volunteer teams are likely to be.

### During the expedition

Once the volunteers are there, you **must give them enough meaningful tasks to do** to keep them occupied for most of the day, or night, depending on the project. **Common mistakes are that the field worker does most of the work him/herself whilst the volunteers just look on**. Please do **not** slip into this habit and make sure that you train the volunteers and then let them work on the tasks assigned by you, if necessary under supervision, but not just as onlookers. **Whilst conducting research, volunteers should never work alone, unless in exceptional circumstances**. Put them into teams of at least two wherever possible and try to make sure that less confident volunteers are paired up with more experienced and confident ones.

## Nannying and treating people as adults

Biosphere Expeditions strongly believes in empowering people by treating them as adults and letting them get on with the job after appropriate training (usually 1-2 days) in safety and data collection techniques. After this training phase, volunteers can be sent out in small groups by themselves to do transect, hide work, set up and retrieve camera traps, check and reset track traps, etc. **Staff or guides only need to be present when they want to be or when the research task or safety or animal welfare concerns necessitate this** (for example when tranquilising and collaring an animal, handling a potentially dangerous animal, etc.). It is not necessary to have a guide with each group and “nannying” of this kind is strongly discouraged by Biosphere Expeditions. People are not stupid - if you send each group out with supervision, they will feel nannied and they will ask themselves what their real contribution is.

## Data quality assurance procedures

It is up to you as scientist to create ways in which people can collect useful data for you without being nannied. This can be done by giving them cameras, for example, to take photos of tracks they are not sure about and designing a quality assurance protocol through which they submit these data to you first for checking. Biosphere Expeditions will not run safari-style expeditions where participants are nannied by a guide, whom they just follow and simply act as scribes.

Make sure that you collect all the data gathered in a way that the volunteer can understand. They should see that you are making an effort in collating the data they have collected and that you are taking note of it. You must provide **standard data entry sheets or apps**, which assist the volunteers in collecting the right kind of information and give them a format to work to. Volunteers appreciate it if you then sit down with them, say once a day, go through the data collected and explain to them what it means. During this meeting you should also give them an outlook on what is to be done the next day and why. Always be prepared to answer questions about ‘why’, ‘how’, ‘what does it all mean’, ‘how does it fit into the bigger picture’, ‘how are we helping you’ and ‘what is going to happen to the information we have collected’. Volunteers are often keen amateur naturalists and the more information you can provide them with about the local flora and fauna, the better.

**As a general rule, well occupied, well informed volunteers whose data collection is being appreciated and taken note of, and who are integrated into a well-run and organised expedition make for excellent and very motivated research assistants. Volunteers who are supplied with too little or sub-standard food and information about the research, who have to sit around without anything to do, or who have to wait around endlessly whilst things are being organised thus showing up bad expedition organisation, make for frustrated and difficult research assistants.**

## Post-expedition

**Within three months** of the end of the expedition you must provide Biosphere Expeditions with a **post-expedition report** on the expedition’s research. This report should follow the standard format of introduction, materials & methods, results & observations, discussion & conclusions, outlook, references and be of a standard as expected of an international research paper published in a reputable scientific journal (you can view previous reports at [www.biosphere-expeditions.org/reports](http://www.biosphere-expeditions.org/reports)). It should give an indication of what was done and how this made a difference to your research. The outlook should give an indication of what will be done with the data collected. Please submit your report in electronic format, preferably as a PC Word document. **Your report will then be edited and incorporated into the expedition report.** This expedition report will be published within six months of the end of the expedition and will be sent to all members of the expedition, including yourself. It will contain information about the expedition, its finances, your report, diary excerpts etc.

**Biosphere Expeditions encourages you to publish the results** of our joint research work in English-speaking scientific journals. Help is available from biologists from Biosphere Expeditions to assist you in writing papers and submitting them to relevant journals, so please get in touch with us if you have publishable material. In any such joint papers, the biologist from Biosphere Expeditions helping you with publication would expect to be your **co-author**. In any reports or papers you publish without the help of a biologist from Biosphere Expeditions, you **must** mention Biosphere Expeditions in the acknowledgements if Biosphere Expeditions was involved in the raw data collection.