


Section 1:  
INTRODUCTION



*The boundary between parks and people in Rwanda, A. Plumptre, WCS*

Crop raiding is a cause of much conflict between farmers and wildlife throughout the world. In Africa the great dependence of a large proportion of the human population for their survival on the land, coupled with the presence of many species of large mammal leads to many sources of conflict between people and wildlife. This in turn creates increasing friction between protected area managers, and local communities living in the regions that border these protected areas. In certain cases human-wildlife conflict is undermining what have been, to date, quite successful conservation programmes, such as the CAMPFIRE Programme in Zimbabwe (see Osborn & Parker, Appendix I). At a meeting of the Wildlife Conservation Society's Africa Program in 1997, human-wildlife conflict was identified by many present as one of the major threats to conservation, and one of the most difficult problems that conservation managers face in Africa.. At this meeting it was proposed that it would be useful to bring together experts in the field to share experiences and synthesise many of the lessons learned from crop-raiding research across Africa.

To date there has been comparatively little systematic research carried out to investigate patterns of crop raiding activity by wildlife and its potential impact on farmers' food and household economic security. The majority of the research that does exist has focussed on the issues related to crop damage by elephants and rodents, yet other animals such as primates, and ungulates, are often cited as troublesome 'pests' in agricultural areas. Unfortunately, much of the information that is available is 'hidden' within reports and papers, and not available in refereed journals. While there are numerous useful and informative reports to be

found in local Game Department or Ministry archives it can be very difficult to get hold of such resources unless one can visit in person. Thus, as more people begin to investigate human wildlife conflict at different sites, it is to everyone's advantage if there is greater sharing of information and expertise. Consequently, a workshop, funded by the Wildlife Conservation Society and hosted by their Cameroon Biodiversity Project, Nguti, was organized in January 2000 to:

- 1) facilitate the dissemination of results from research projects at different African sites,
- 2) highlight research priorities,
- 3) develop a guide to help protected area managers and researchers identify the problem and develop appropriate research strategies and methods for investigating human-wildlife conflict issues, and
- 4) Promote the development of linkages between researchers and managers, and encourage a future pan-Africa analysis of crop raiding, analysing the effects of farming practices, guarding strategies and hunting pressures on economic losses to farmers in different regions.

The range of expertise and experience amongst the participants was especially valuable in helping present a more comprehensive view of human-wildlife conflict issues, with particular reference to crop raiding by wildlife. The range of summary papers included in this publication (Appendix I) illustrates this. Authors provide examples of the range of different aims and objectives of human-wildlife conflict studies, from detailed social (e.g. Hill, Plumptre) and ecological studies (e.g. Ilukol, Rose) to outlining and evaluating monitoring strategies to assist in the management of human-wildlife conflict situations (e.g. Hoare, Kagiri, Nchanji, Osborn & Parker). It is apparent that while wildlife biologists, managers, and social scientists may have different research priorities and approaches, each approach has a valuable contribution to make in extending our understanding of different perspectives on human-wildlife conflict issues.

The workshop took place over four days, and individuals engaged in research and/or management of human-wildlife conflict issues throughout Africa were invited to attend. Participants, focussing on devoted the first day to presentations

1. the impact of crop raiders on farmers – crop losses and economics, and
2. the farmer's perspective.

These papers have been written up and included in the Appendix under three general themes:

1. The manager's perspective; 2. The farmer's perspective; and 3. Elephants – a special case.

After the presentations there was an opportunity for all the people involved to take part in a “brain-storming” session, to identify important issues for consideration when investigating crop raiding by wildlife. As a consequence of this initial exercise the following areas were highlighted for discussion during the remainder of the workshop:

- (a) Community factors associated with crop raiding by wildlife
- (b) The economic aspects of crop raiding and crop damage
- (c) Spatial and temporal distribution of wildlife crop raiding activities, and
- (d) Assessment of crop damage and identification of the animals involved.

Presentations given on the second day focused on issues related to ways of deterring wildlife from raiding crops, and facilitating conflict resolution. Participants then broke up into 3 groups to begin developing ideas of what a manager needs to know when trying to develop programmes to reduce human-wildlife conflict in the context of crop raiding. The three key areas for consideration were:

- 1) Local communities and the impact of crop raiding on food/economic security
- 2) Crop raiding activities of wildlife and the factors that render farmers vulnerable to crop damage by wildlife
- 3) The range of possible deterrence methods, and their effectiveness and suitability in different situations.

An important observation raised during informal discussions between participants concerned the frequent lack of compatibility between the information managers consider critical, when dealing with crop raiding issues, and the material that researchers are actually collecting. This can be a significant problem at a number of different levels within an administrative hierarchy, where research programs have been given permission to proceed by senior officials, but local managers, (i.e. the people who are required to deal with conflict issues in the field), consider themselves excluded from discussion of the suitability and value of the proposed research. Partly in response to this observation the penultimate day was given over to the issue of research methods, with a particular emphasis on (i) the type of information needed by managers to assess a conflict situation prior to the development of intervention strategies and (ii) appropriate data collection strategies for use in the field.

This document comprises summaries of all the case study presentations given at the workshop (Appendix I), a section on what managers and researchers should think about when planning to tackle this issue (Section 2) along with summaries of the outcomes of the different discussion groups (Sections 3, 4, and 5). Included within these sections are additional

discussions of various methodological issues such as possible biases in different types of information, pros and cons of applying absolute quantities to measures of crop damage, etc. The aim of this document is to provide researchers and protected area managers with (i) a better understanding of the issues that should be considered when investigating human-wildlife conflicts, (ii) an outline of useful research strategies and tools, (iii) an indication of the limitations of different research strategies and hence the resulting data, and (iv) to encourage better communication and consultation at all levels in negotiation between management needs and research aims and objectives.