

Asking sensitive questions: illegal bushmeat hunting in the Serengeti

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How to estimate illegal resource use?

- Law-enforcement records
- Indirect observation
- Forensics
- Direct observation
- Self-reporting
- Direct questioning
- RRT
- Modelling

Social surveys

- **Social-desirability** bias
- **Non-response** bias

Asking the Embarrassing Question

BY ALLEN H. BARTON

University of Chicago

1. The Casual Approach:

“Do you happen to have murdered your wife?”

2. The Numbered Card:

Would you please read off the number on this card which corresponds to what became of your wife?” (HAND CARD TO RESPONDENT)

1. Natural death

2. I killed her

3. Other (What?)

(GET CARD BACK FROM RESPONDENT BEFORE PROCEEDING!)

3. The Everybody Approach:

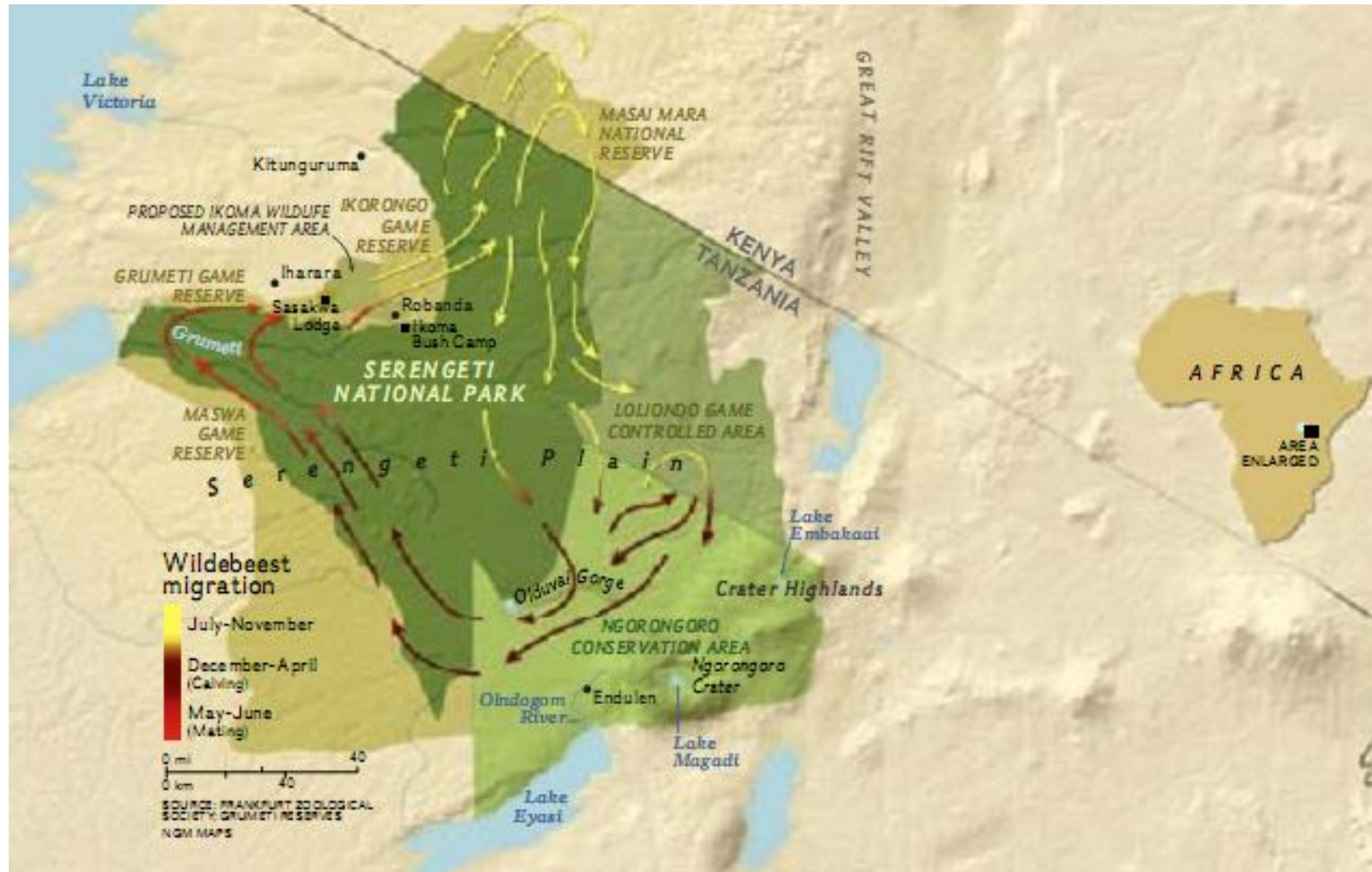
“As you know, many people have been killing their wives these days. Do you happened to have killed yours?”

4. The “Other people” Approach:

(a) “Do you know any people who have murdered their wives?”

(b) “How about yourself?”

Study-area: Serengeti, Tanzania



Illegal bushmeat hunting



FZS

FZS

Illegal hunting in the Serengeti

How many?

8 to 57% hhs

Who poaches?

Ethnic group

Household size

Household migration

Household employment

Season

Hunting as source of cash

District

Distance from village to
protected areas

Access to alternative sources of
protein and/or income

Examples

“715 individuals were asked if they were involved in hunting. Many [84%] chose not to answer” (Campbell et al. 2001)




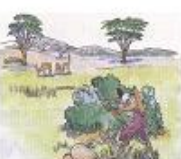
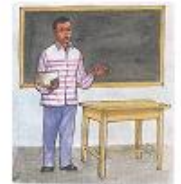
“deep reluctance among the respondents to talk about bushmeat hunting” (Nyahongo et al. 2009)

“collected data needs to be treated cautiously, because we may have been lacking important information due to fear from respondents” (Mfunda & Røskaft 2010)

Unmatched-count technique




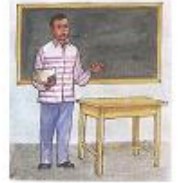
Treatment

Card 1

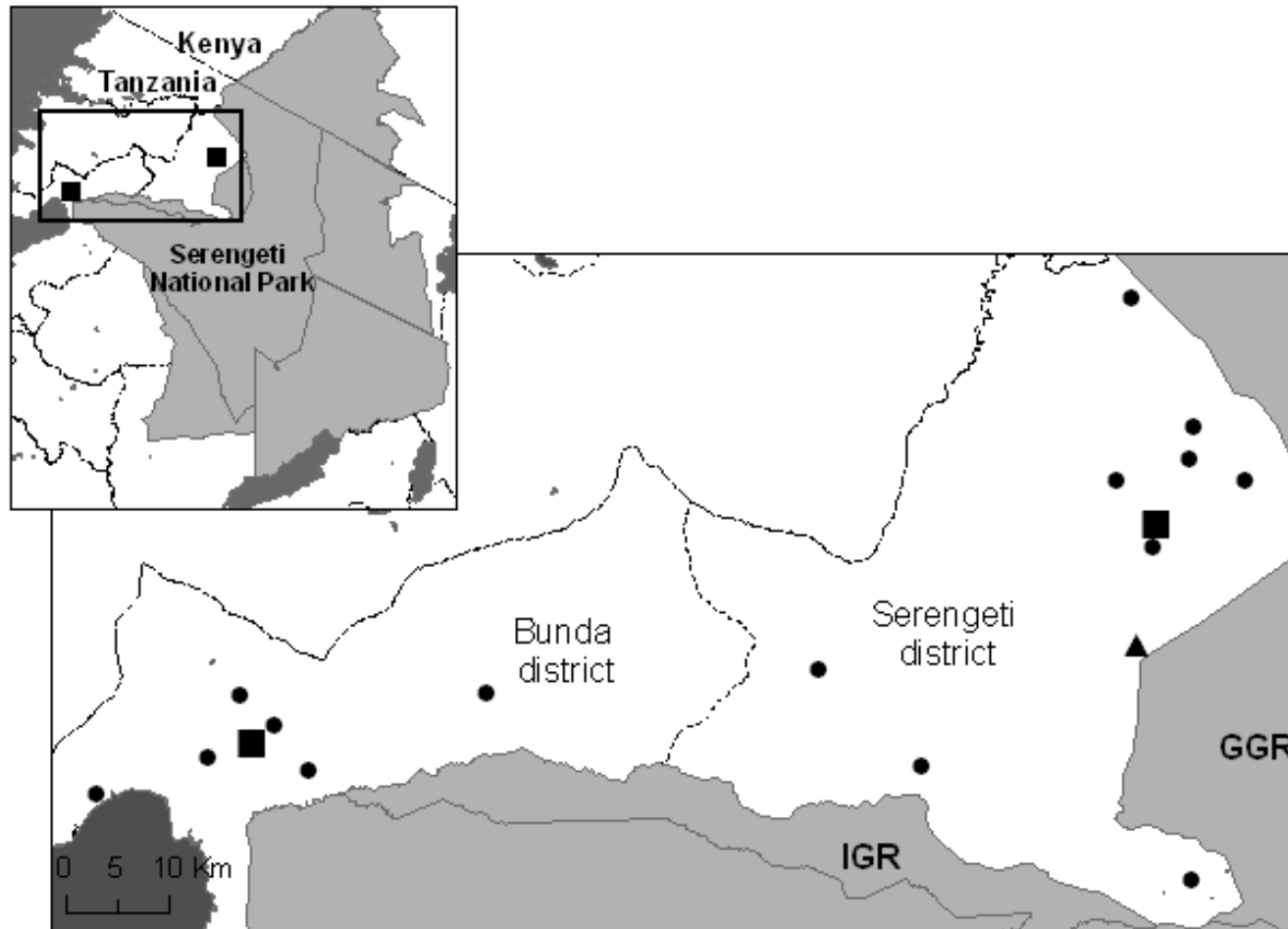
Livestock herding	
Farming	
Trading	
Hunting	
Teaching	

Control

Card 2

Livestock herding	
Farming	
Trading	
Teaching	

Main data collection



15 villages, Western Serengeti
1192 household interviews (February-June 2011)

Questionnaires

- A. Individual characteristics
- B. Household characteristics
- C. Household participation in hunting
- D. Opinion about survey technique

Analysis

Treatment

Card 1

Livestock herding



Farming



Trading



Hunting



Teaching



Control

Card 2

Livestock herding



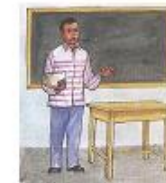
Farming



Trading



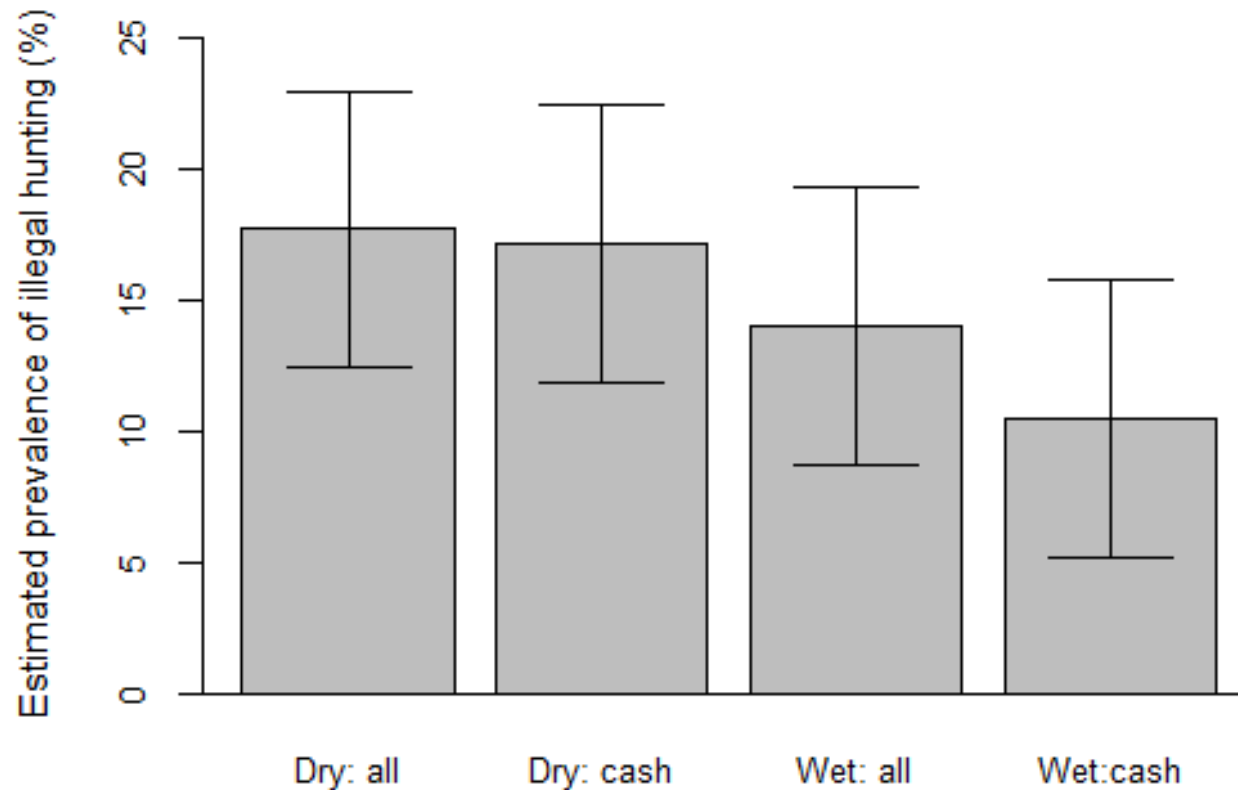
Teaching



Results I

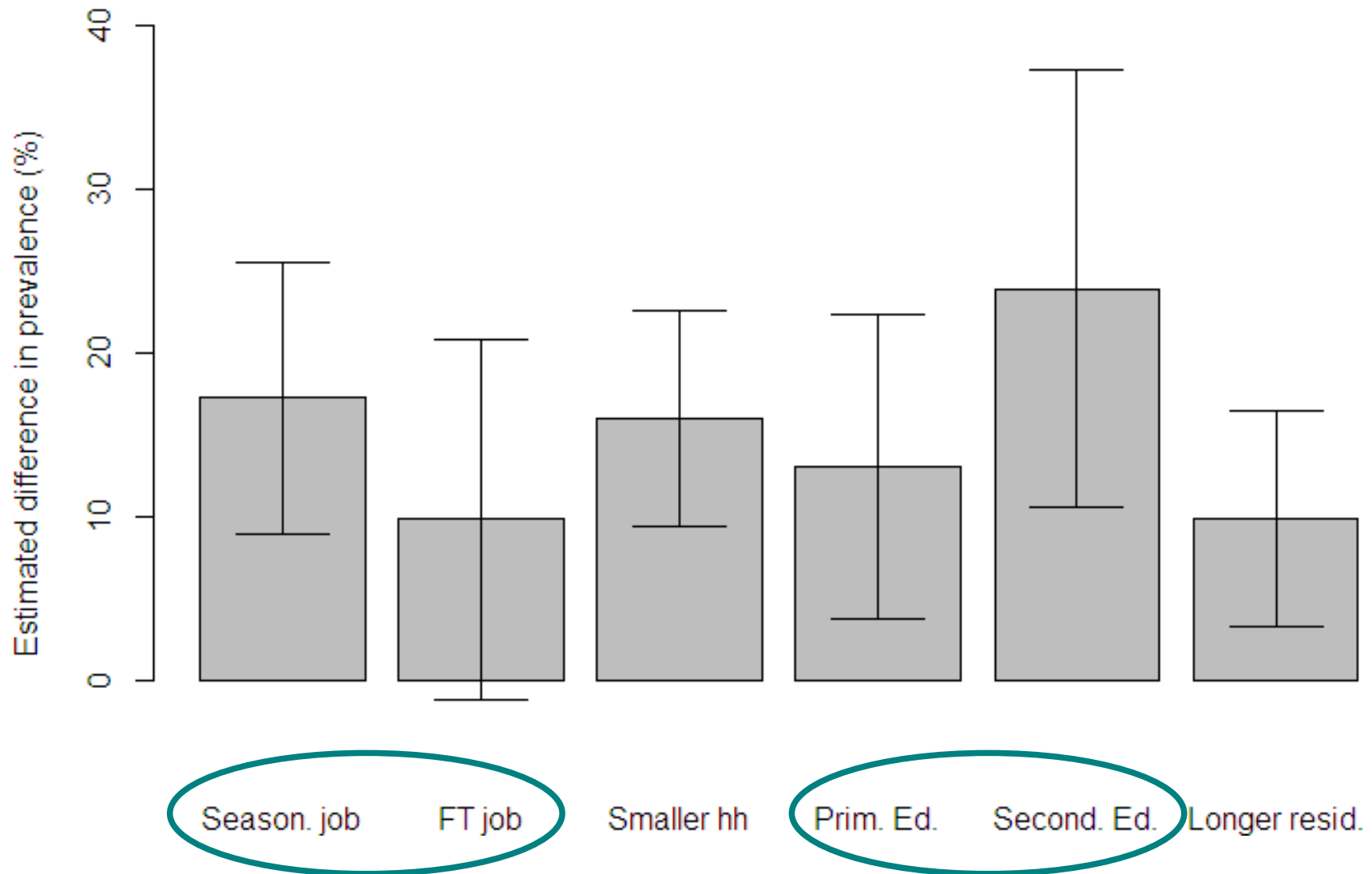
Non-response rate: <3%

Estimated hunting households (%):



Results II

Model coefficients (\pm S.E.):



Conclusions I

- poaching remains widespread in the Serengeti
- households hunt both for food and cash all year round
- current alternative sources of income may not be sufficiently attractive to compete with the opportunities provided by hunting

Conclusions II

A new tool for the conservationists' kit?

- Potential for wider application
- Sample size requirements
- Disentangle survey processes from actual effects of interest

Acknowledgments & Questions



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