

Sampling strategies for on-site sampling: an overview

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Functions of Forest Ecosystems*

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Presentation

- Introduction, rationale for the presentation
- On-site vs. off-site sampling
- Overview of some studies using on-site
- Pitfalls of on-site sampling
- Niches to be exploited



Introduction

Rationale for focusing on on-site sampling

- widely used in the context of economic valuation research (TCM, CE)
- not well known in other disciplines (sociology)
- practical reason – *What standards should we adopt?*



What is on-site sampling?

- Term used solely in environmental economics (?)
- Contact recreationist on-site (Parsons 2003)
 - interview on-site
 - contact on-site, interview/ fill in questionnaire elsewhere
- On-site sampling mentioned by Clawson (1959)
 - one of the first application of TCM



On-site and off-site sampling

	On-site	Off-site
Population	<ul style="list-style-type: none">● visitors only	<ul style="list-style-type: none">● general population, particular populations (members)
Non-visitors	<ul style="list-style-type: none">● not included	<ul style="list-style-type: none">● included
Sampling	<ul style="list-style-type: none">● difficult to get random sample,● usually no frame for quota sample.	<ul style="list-style-type: none">● relatively easy to get random sample (not in CZ)● quota sampling easy
Difficulties	<ul style="list-style-type: none">● representativeness of the sample● administration● rejection, interference w./ respondent● arrival – departure● endogenous stratification● selection bias	<ul style="list-style-type: none">● recall bias (unknown)● cost (the further, the more costly)
Advantages	<ul style="list-style-type: none">● hitting directly the target population of visitors	<ul style="list-style-type: none">● information about non-visitors● avoids all difficulties of on-site (to certain degree)



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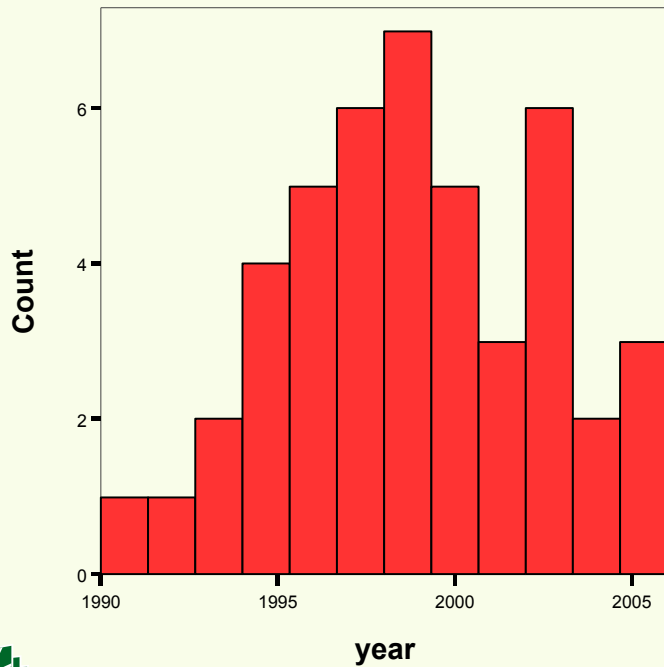


Overview of some literature

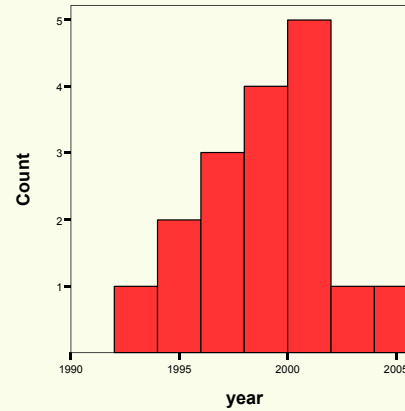
- 47 articles (recreation values, TCM)
- Focus on following questions:
 - purpose of a study
 - target population
 - sampling strategies
 - means used to verify the representativity of data



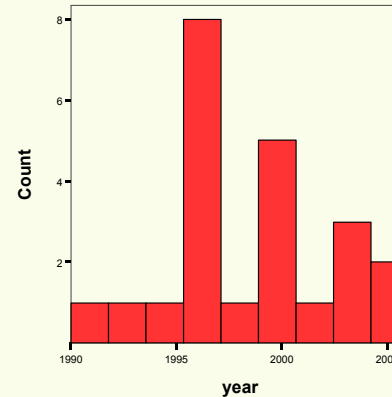
On-site and off-site



All studies



On-site



Off-site



Types of sampling

	Off-site	On-site
Random	6	2
Random dialing	6	-
Random (list of members)	4	-
Convenience	1	3
Other	-	1
Non reported	7	11
TOTAL	24	17



Sample size

	N	Minimum	Maximum	Mean	Std. Dev.
Off-site	24	148	153000	15558	41257
On-site	17	200	15731	1641	3672



Further results

- Many on-site data are not representative for target population (frame population)
- Representativity is not tested
- Other important information are missing (non-response rate, sampling strategy...)
- No standards are established



Standards of on-site

Representativity ?

- Systematic sampling, random number systematic sampling (access points)
- Quota sampling (pubs, crossroads, parking lots)
- Convenience sampling (pubs, crossroads)



Standards of on-site

Representativity ?

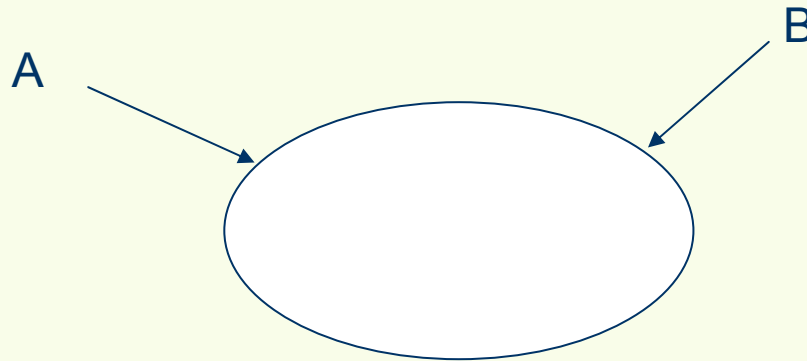
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Standards of on-site

Representativity

- Systematic sampling, random number
systematic sampling (access points)
 - Time and access points (random sampling)



= we get stratified sample:
1. Time and place; 2. units
time and place → units



Implications for practical sampling

- Do pilot survey
- Do random stratified sampling on access points (over the period)
- Do off-site to control representativity
- Examine relations: place, time, units
- Do time-reliability tests
- Compare with other studies



Thank you for your attention

