

Understanding recreational fishing in the perspective of second homes and tourism

Eila Seppänen*, Anna-Liisa Toivonen**

*Finnish Game and Research Institute (FGFRI), Enonkoski, Finland

** FGFRI Helsinki, Finland

Abstract: In Finland, one third of the entire population of five million goes fishing annually. Simple hook and line is the most popular fishing gear and jigging through the ice in wintertime is the other everyman's right regarding fishing. Every other fisher uses a spinning rod. Subsistence fishing is more usual than generally elsewhere. Gill nets and fish traps are common gears among summer cottage dwellers. There are nearly half a million summer cottages or second homes in the countryside. Compared to any other region in Europe, Finns have proportionally the greatest number of cottages available for their leisure time. Since the cottages most often lie by a lake or on the coast of the sea it is only natural that summer cottage dwelling is closely related to recreational fishing. We conducted a large survey in 2006 to measure the recreational fishing activity in the 226 fishery regions that the country is divided into. We also posed a question on fishing while staying in the summer cottage. As a result we found that 37 % of the fishing households only fish within the fishing region where their summer cottage lies. Fishing in general and fishing in summer cottages in particular create tourism in rural areas. Our results show that urban households move significantly more when they go fishing than rural households. Households living in capital region move most. They fish in several fishery regions compared to other urban households. Furthermore, while staying in their summer cottages, proportionally, urban households participate in fishing more than the rural ones.

Introduction

Recreational fishing is one of the most popular spare time activities in Finland: in 2006, there were more than 1.8 million recreational fishers in one million households and in the entire population of five million and furthermore, 76 000 persons name fishing as their most important hobby (Anon. 2007). Recreational fishers consist of all age groups and social classes, and one third of them are women (Salmi et al. 2006). Fishing is popular also in the other Nordic

countries, and the highest participation is presently in Norway where one half of the inhabitants go fishing at least once a year. (Statistisk sentralbyrå 2005). In Central European countries, on the contrary, only 5 % of the population goes fishing once a year (Toivonen et al. 2000). Participation in recreational fishing varies regionally in the Nordic countries: the higher proportion of people in the population participated in fishing the further North and East one goes (Appelblad 2001).

Simple hook and line is the most popular fishing gear and jigging through the ice in wintertime is the other everyman's right regarding fishing (Anon. 2007). As the license policy for rod fishing has been liberalized, every other fisher uses a spinning rod. Gill nets and fish traps are common gears to summer cottage dwellers because of the license policy that only allows standing gear to water owners or cottage dwellers with restrictions. In 2006, fishers used gill nets and fish traps on one third of all the fishing days, 55 % of the catch was caught by those gears and 43 % with rod fishing. Wide use of gill nets and fish traps is linked with the traditions of household fishing. Subsistence fishing is more usual in Finland than generally elsewhere but nowadays the catch is no more vital for nutrition and livelihood. It may be vital for tasty meals, though, and traditional cooking in the cottage.

Recreational fishing is also a means of utilizing the ecosystem services that lakes and coastal waters provide. Those services cover among others catches, recreation and reproduction of fish. According to the statistics (Anon. 2007), the total catch of recreational fisheries is estimated to be 32 million kg annually, with the value of nearly 56 million euros. More than 75 % of the catch is harvested from inland waters. Many fish stocks are maintained by continuous stocking with hatchery-reared fingerlings.

In Finland, nearly half of all the territorial waters and nearly all inland waters are governed by shareholders' associations. The associations sell licenses to shareholders and often to cottage dwellers as well. Although fishing right is a private property, bound to land ownership, changes both in

the management structure and the fishing license policy have been conducted to promote urban and recreational interests (Salmi & Muje 2001). However, extensive recreational fishing may also create conflicts between different water user groups.

Nowadays about one in two Nordic households have access to second homes (Müller 2007). Many people seek simpler life forms while the material well-being of home and work has increased and closeness to nature is one of the most important incentives of keeping a cottage. Besides nature and landscape, also opportunities to recreational activities are emphasized (Jansson & Müller 2003, 2004; Lundmark & Marjavaara 2005; Müller 2005). As the distance between home and summer cottage increases, the attractiveness of the region has to increase to be selected as cottage environment (Aho & Ilola 2006). The further the cottage is located from the regular residence, the more probably the place is the owner's birthplace (Pitkänen & Kokki 2005). Connection to home district and ancestry are one of the most important motives to have a residence for leisure time. Summer cottages are commonly used as the families' secondary residences through the year, and not just in the summer, and they are typically situated on a "weekend distance" from permanent homes. It can be concluded that summer cottages or second homes have an important cultural meaning representing summer, connections to the countryside, the good life and family history (Kaltenborn 1997, 2002; Löfgren 1999; Jansson & Müller 2003).

Summer cottages most often lie on the coast of lake or by the sea and hence, high participation in recreational fishing is

associated with summer cottage culture. As 10 % of the mainland area is covered by lakes (Statistics Finland 2005), plenty of recreational fishing opportunities are available. According to Sievänen et al. (2007) only swimming, walking for pleasure and berry picking have higher participation percentages in cottage dwellers' profiles than fishing. Also Sipponen and Muotka (1996) have pointed out that the number of summer cottages is one of the key variables when explaining the demand for recreational fishing on a lake.

The shift from a peasant state towards modern society has taken place quite recently, and hence many urban Finns have roots in the countryside (Granberg 1999). According to Statistics Finland, summer cottage ownership became more common towards the end of the 1950s, when the number of modest summer cottages and weekend cottages gradually started to increase. In the 1960s, people started to expect summer cottages to be spacious and as well equipped as urban dwellings. The number of summer cottages continued to increase and the growth was strongest in the 1980s: over 100 000 new cottages were built during a ten year period. The number of cottages grew because of construction of new cottages and the use of existing inherited dwellings as summer cottages. After the second World War, the Finnish summer cottage stock has grown from a very modest number to nearly half a million.

In many western countries, summer cottages or second homes are an integral part of leisure history, and they are increasingly popular in modern societies. In round figures, half of the Nordic households have

access to second homes, and in Finland, the factual number may even be higher: 27 % of households own a second home, even 45 % of Finns have access to a summer cottage regularly and 56 % visit a summer cottage at least once a year (Sievänen et al. 2007). Compared to any other region in Europe, Finns have proportionally the greatest number of cottages available for their leisure time (European Community Household Panel, ECHP; Reijo & Junnto 2002).

Summer cottage dwellers use the services of the municipalities where their cottages lie and the local inhabitants consider them tourists. They have a significant impact on the local economies and businesses since in many municipalities the number of inhabitants is seasonally more than doubled due to the summer cottage dwellers. Still, as Tuulentie (2007) states, cottage dwellers are kind of hybrids between locals and tourists. The aim of our study was to investigate the connection between recreational fishing and summer cottage dwelling and furthermore, their relation to tourism in rural areas.

Materials and methods

In Finland, the license fees paid by recreational fishers to the state are partially reallocated back to the owners of the fishing waters. The state also sells rod fishing licenses to privately owned lakes and sea areas. Those fees are all refunded to the owners. Therefore, a large national mail survey "Fishing in Finland" (Toivonen 2006) was conducted in 2006 to measure the recreational fishing activity in the 226 fishery regions that the country is divided into. The main target of the

survey was to estimate the number of the days when each member of the household had been fishing using different groups of fishing tackle. In addition, a question was posed on fishing while staying in the summer cottage.

A geographically stratified sample of 40 000 persons was randomly drawn from the population register among citizens aged from 18 to 74. They were first sent a note telling that a survey questionnaire will follow. The actual mail survey had three contacts where the second one was just a reminder. The survey covered all members of the households of the recipients, so also children were included.

The response rate was 58 % i.e. 23 400 where 53 % i.e. 12 400 were fishing households. All responses were first weighted according to the strata and inclusion probabilities. Weights were calibrated to correspond to the marginal distributions of different household types formed according to the size and age distributions. The bias caused by non-response was corrected using the response homogeneity group model contacts being the response groups. Missing items were imputed obtaining values from hierarchically ordered data. SAS statistical software was used to calculate the estimates and statistical probabilities. The geographical data were used to construct density maps of where people live and where they fish.

Results

The majority of recreational fishers live in cities or other densely populated areas in southern Finland. The most popular fishing areas are in central and eastern

regions in the lake district, in northern and north-eastern Finland as well as in the archipelago (Figure 1). More than half of the population consider that fishing is connected with living in summer cottages, and nearly a half of urban people fish while staying in their summer cottage.

Our data (Toivonen 2006) gave an overall estimate of 2 286 000 households in Finland while the official statistics (Anon. 2005) in 2005 state 2 435 000 including foreigners that were absent from ours. In nearly half of the households (1 068 000) at least somebody fished for recreation. The corresponding number in the statistics is 1 021 000 (Anon. 2007). We asked if the respondents in any of the fisheries regions 1) owned summer cottages, 2) had access to a summer cottage or 3) had hired one during 2005. The number of accessible cottages was 923 000. Noting that at the time there were only 474 000 summer cottages in the country, it proves that families share their cottages and that there are companies and organizations that offer cottages for their employees and that there are cottages for rent.

Half of all million fishing households fished in those cottages that were accessible to them either by owning, through family or employer or that they had hired. A few of them fished in accessible cottages in several fisheries regions. It was estimated that 672 000 households made visits to 813 000 fisheries regions to fish for recreation in a summer cottage, either their own one or somebody else's. Majority of the households (87.5 %) fished in maximum two fisheries regions, and the proportion of those who fished only in one fisheries region was 67.9 % (Table 1). These last-

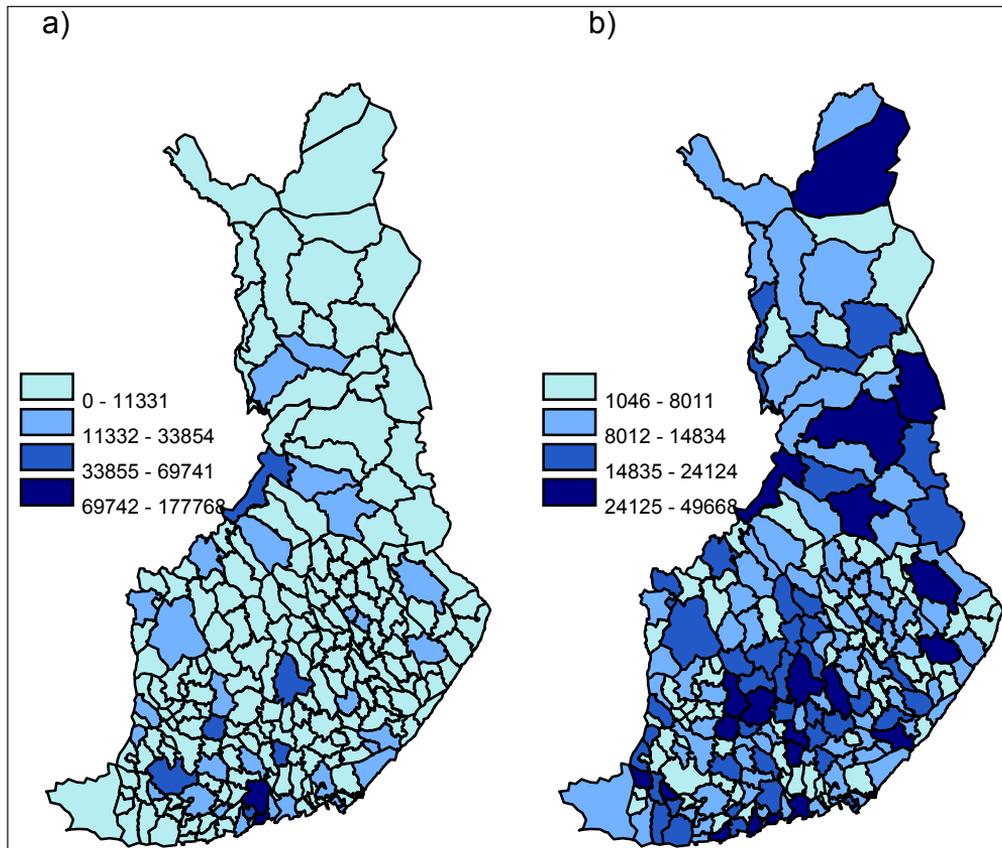


Figure 1. Number of recreational fishers by fisheries regions, a) where they live and b) where they go fishing in Finland in 2005.

mentioned households and their fishing were analysed onwards more closely.

When fishing only in one fisheries region, there was a significant difference in the proportion of those who fished in their domestic fisheries region and those who fished in their summer cottage region (see Table 1). The prevalence of fishing households who fished only in their summer cottage region was almost twofold compared to those who fished only in their domestic fisheries regions. The proportion of fishing households who fished in only one region that was neither domestic nor

summer cottage's region was only a third of the prevalence of the households fishing only in their summer cottage.

When compared to other fishers whose fishing is not connected with summer cottage life, cottage fishers (i.e. fishers who fish while staying in the summer cottage) were somewhat younger than them. Families with children constituted the largest group forming 37 % of all the family types fishing in their own cottage. In contrast, the prevalence of families of two adults without children and of only one adult made up 11 % and 13%,

Table 1. Prevalence of fishing households in relation to the number of fisheries regions where they fish, and prevalence of fishing households who fish only in one fisheries region.

Number	%	Definition
729 470	67,9	fish only in one fisheries region *
210 222	19,6	fish in two fisheries regions
72 961	6,8	fish in three fisheries regions
30 889	2,9	fish in four fisheries regions
13 025	1,2	fish in five fisheries regions
7 860	0,7	fish in six fisheries regions
3 913	0,4	fish in seven fisheries regions
3 424	0,3	fish in eight fisheries regions
2 226	0,2	fish in nine or more fisheries regions
1 073 990	100,0	
* Fishing households who fish only in one fisheries region		
215 416	20,1	fish only in their domestic fisheries regions
393 500	36,6	fish only in their summer cottage region
120 554	11,2	fish only in one region, not domestic, not summer cottage's

respectively. When staying at summer cottage, children got their first experiences in fishing quite young, at the age of 5 – 10 years. Usually they fished with their parents or grandparents. In addition, for women, the probability of their fishing when spending time at summer cottage was higher than on other occasions.

Fishing in general and fishing in summer cottages in particular created traffic between urban and rural areas. Mobility of urban households was statistically significantly different from rural households (Kruskal-Wallis, $p < 0.0001$), urban households moving significantly more when going fishing than rural households. Households living in capital region moved most. They fished in several fishery regions compared to

other urban households. Rural households moved least of all, thus they fished close to their homes (Table 2). The proportion of urban and rural fishing households who fish in three or more fisheries region was 13,6 % and 10,5 %, respectively.

When fishing only in one fisheries region, rural households fished substantially more in their domestic fisheries region compared to urban households (see Table 2). While staying in their summer cottages, however, urban households participated in fishing more than the rural ones, 41 % and 28 %, respectively. When fishing in only one region which is neither domestic nor summer cottage's region, the prevalence difference between urban and rural households was not significant, 13 % and 8 %, respectively.

Table 2. Prevalence of urban and rural fishing households in relation to the number of fisheries regions where they fish, and prevalence of urban and rural fishing households who fish only in one fisheries region.

Number	%	Definition
Urban households		
454 326	66,1	fish only in one fisheries region *
139 653	20,3	fish in two fisheries regions
50 486	7,3	fish in three fisheries regions
43 288	6,3	fish in four or more fisheries regions
687 753	100,0	
* Urban households who fish only in one fisheries region		
81 375	11,9	fish only in their domestic fisheries regions
284 122	41,3	fish only in their summer cottage region
88 816	12,9	fish in only one region, not domestic, not summer cottage's
454 313	66,1	
Rural households		
275 158	71,2	fish only in one fisheries region **
70 569	18,3	fish in two fisheries regions
22 475	5,8	fish in three fisheries regions
18 050	4,7	fish in four or more fisheries regions
386 252	100,0	
** Rural households who fish only in one fisheries region		
134 042	35,7	fish only in their domestic fisheries regions
109 378	28,3	fish only in their summer cottage region
31 738	8,2	fish in only one region, not domestic, not summer cottage's
275 158	71,2	

The most popular fisheries regions where the households fished at their own summer cottages were situated in Northern and North-Eastern Finland, Kainuu and the Finnish lake district (Figure 2). Those who lived in the capital region fished at their

summer cottages either in southern Savo in the lake district or close to their homes in Uusimaa and those who lived in Oulu, for instance, fished in North-Eastern Finland and Kainuu closer to the Russian border.

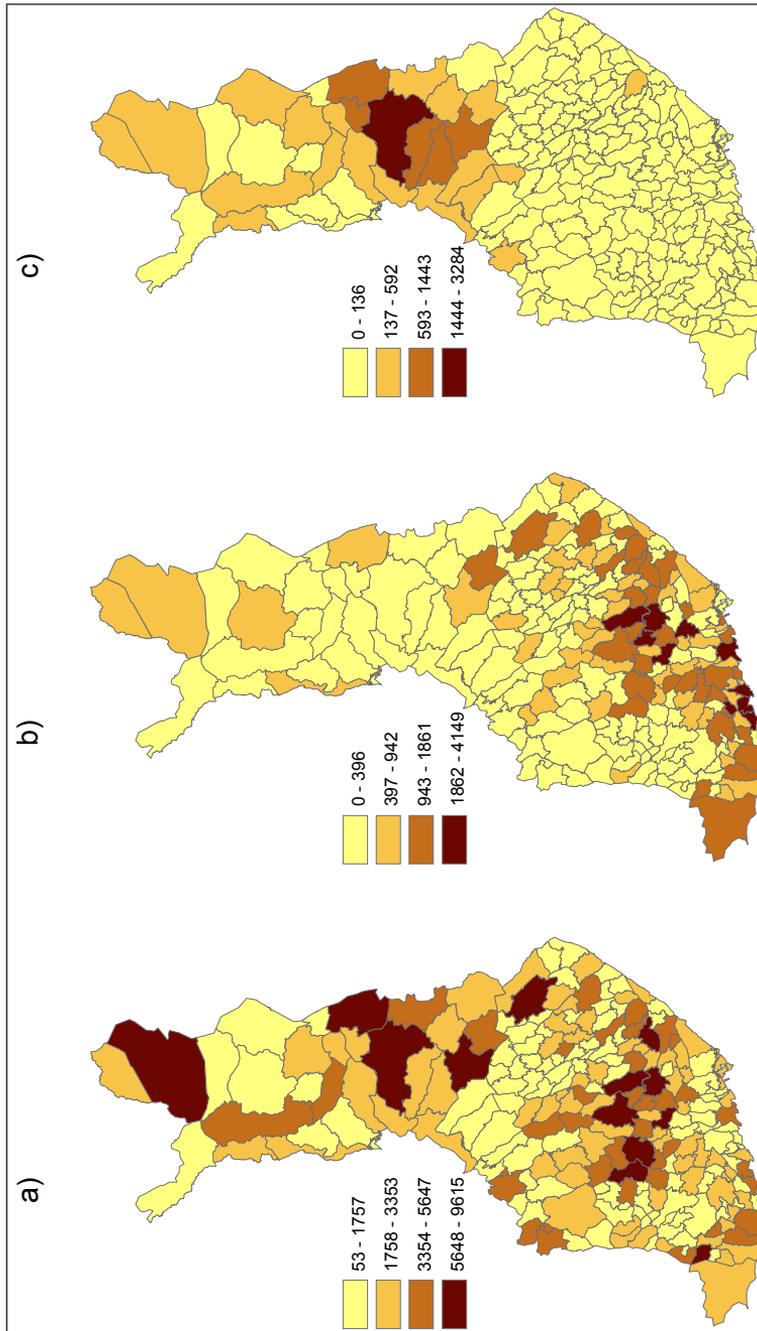


Figure 2. Number of households fishing in their own summer cottage in Finland in 2005: a) all households, b) households from Helsinki region and c) households from Oulu region.

Discussion

The present study showed that half of all million fishing households fished while staying in accessible summer cottages. Furthermore, the proportion of those who fished only in their summer cottage region was nearly twofold compared to those who fished only in their domestic fisheries region. So, it can be stated that summer cottages are important bases for fishers. In Finland, high participation in recreational fishing is associated with life styles and summer cottage culture. At the end of 2006, the total number of summer cottages or second homes in the countryside of Finland located close to lakes or the sea shore was 475 000. Hence, it is only natural that recreational fishing is closely related to summer cottage dwelling.

Summer cottages play an important role also in our neighbour countries: the number of summer cottages in Sweden being slightly higher and in Norway lower than in Finland. Summer cottage culture differs between these countries. Swedish people prefer that the summer cottage is located near their home, to be able to visit there even daily (Jansson & Müller 2003). Norwegians build their cottages also in mountain areas, especially during recent years, so that they can go skiing (Kaltenborn 2002; Statistics Norway 2005). In Finland, use of summer cottages or second homes is closely related to recreational fishing, and furthermore, it connects urban people with fishing activities and rural traditions. In USA (Stynes et al. 1997) as well as in Finland, cottage owners typically have fishing gear and a boat at their cottage, which facilitates fishing for urban people.

This study also suggested that recreational fishing is related to tourism in rural areas. This is connected with travelling between urban, densely populated areas and rural regions. It was noticed that capital-region-households moved most, and while staying in their summer cottages, urban households fished notably more than the rural ones. Urban people go to countryside for simpler life forms, as well as for social experiences relating to their childhood and rural culture. Fedler et al. (1998) have found that childhood experiences are important for commitment to recreational fishing during adulthood. Hence, it can be stated that learning fishing traditions and skills during summer cottage dwelling maintains and enhances participation and opportunities to recreational fishing. In the summer cottages, families and relatives spend time and also participate in recreational fishing together. In many cases, grandfather is the person who teaches the fishing skills to his grandchildren. According to Finnish fishing statistics (Anon. 2005), the highest participation rates are found in the youngest generations. Fishing with spinning rod does not require a license for persons under 18 years old and that has created easy access to fishing for the young. The present study showed too that women are more likely to fish when visiting the summer cottage than on other occasions. Summer cottage dwelling also provides many other outdoor hobbies in addition to fishing, such as picking berries and mushrooms, boating and forest work (Sievänen & Pouta 2002).

Cottage people consume and utilise the services provided by entrepreneurs in the country. Earlier studies have shown that cottage dwellers tend to favor small

rural shops and therefore substantially contribute to the maintenance of retail services in the countryside (Nordin 1993; Müller 1999). Distance, however, affects the geographical segmentation of spending money of the cottage dwellers: when the distance between home and summer cottage increases, a smaller amount of goods is brought along and a bigger amount is bought at the summer cottage locality, respectively (Bohlin 1982; Aho & Ilola 2006). Moreover, the distance between home and summer cottage influences the visit density and spending time at the summer cottage (Müller 2002; Nieminen 2004; Pitkänen & Kokki 2005; Aho & Ilola 2006). When interpreting summer cottage tourism from the point of view of summer cottage municipality, summer cottage should be situated far enough from the regular residence that consumption would be directed to the summer cottage locality (Bohlin 1982; Kauppila 2008).

The number of summer cottages and the tradition of fishing at the summer cottages explain the fact that fishing is so common outside the place of domicile. Although fishing tourism in Finland is growing, fishing is still mainly done very spontaneously and independently. We have extensive common fishing rights and even then, the license system is complicated, it does not get on top of a fisher to obtain licenses. In cottage life, catch-oriented fishing and having self-caught fish as meals play an important role. Until the 1980s, recreational and household fishing used to be catch-oriented (Moilanen 2001; Anon. 2002, 2004, 2005, 2007) but nowadays the situation is different. The popularity of angling with hook and line has grown.

As much as 53 % of recreational catch is caught by gill nets and traps. Thus, the summer cottage culture has importance in maintaining the gill net fishing tradition in Finland. Although the fishing license policy is relatively liberal for anglers, from the local water owner's point of view the situation is more inconvenient.

Summer cottage dwellers engage with the society of their cottage locality also as minor owners of the fishing waters. Hence, they form a large group of fishers and water owners representing a mix of rural and urban fishing culture, and thus, they form an important group in balancing the conflicting interests and values (Salmi et al. 2006). Owners visit their summer cottage regularly and are thus closely attached to the summer cottage area. The situation maybe even such that the summer cottage is its owner's real home and the permanent residence is the dwelling place during working life only (Kaltenborn 1998). Therefore, we can readily agree with Rannikko (2009) who has suggested that countryside is nowadays greatly defined by other than traditional peasants. A new kind of societal structure of part-time dwellers and visitors has developed in many places in the countryside. Many visitors and cottage dwellers identify with place where they spend their leisure time: an urban person becomes a villager in the summer cottage.

References

- Aho, S. & H. Ilola (2006). Toinen koti maalla? Kakkosasuminen ja maaseudun elinvoimaisuus. *Lapin yliopiston kauppatieteiden ja matkailun tiedekunnan julkaisuja. B. Tutkimusraportteja ja selvityksiä* vol. 6, Rovaniemi.
- Anon. (2002) *Recreational Fishing 2000*. Finnish Game and Fisheries Research Institute. Official Statistics of Finland SVT. Agriculture, Forestry and Fishery 2002, vol. 54, 1–29.
- Anon. (2004) *Recreational Fishing 2002*. Finnish Game and Fisheries Research Institute. Official Statistics of Finland SVT. Agriculture, Forestry and Fishery 2004, vol. 51, 1–29.
- Anon. (2005) *Recreational Fishing 2004*. Finnish Game and Fisheries Research Institute. Official Statistics of Finland SVT. Agriculture, Forestry and Fishery, vol. 62, 1–47.
- Anon. (2007) *Recreational Fishing 2006*. Official Statistics of Finland. Agriculture, Forestry and Fishery. Finnish Game and Fisheries Research Institute. Riista- ja kalatalous - Tilastoja 7/2007, 1–57.
- Appelblad, H. (2001) *The spawning salmon as a resource by recreational use. The case of the wild Baltic salmon and conditions for angling in north Sweden rivers*. Doctoral dissertation. Umeå universitet, Kulturgeografiska institutionen/SMC, Gerum kulturgeografi 2001, vol. 3, 1–216.
- Bohlin, M. (1982) Fritidsboendet i den regionala ekonomin: vart fritidshusägarnas pengar tar vägen. *Geografiska Regionstudier* 14. Department of Social and Economic Geography, Uppsala.
- Fedler, A.J., R.B. Ditton & M.D. Duba (1998) *Factors Influencing Recreational Fishing and Boating Participation*. Sportfishing and Boating Partnership Council, 1–29. Alexandria, VA.
- Granberg, L. (1999) Introduction. *Sociologia Ruralis* vol. 39, 277–279.
- Jansson B. & D.K. Müller (2003): *Fritidsboende i Kvarken*. Kvarkenrådet, Umeå.
- Jansson, B. & D.K. Müller (2004): Second home plans among second home owners in northern Europe's periphery. In Hall, C.M. & D.K. Müller (eds.): *Mobility, Tourism and Second Homes: Between Elite Landscape and Common Ground*, 261–272. Channel View Publications, Clevedon.
- Kaltenborn, B.P. (1997) Nature of place attachment: A study among recreation homeowners in Southern Norway, *Leisure Sciences* vol. 19, 175–189.
- Kaltenborn, B.P. (1998) The alternate home: motives of recreation home use. *Norsk Geografisk Tidsskrift* 52, 121–134.
- Kaltenborn, B.P. (2002) Å bo i naturen - meningen med hyttelivet. Utmark 3. <http://www.utmark.org>
- Kauppila, P. (2008). Missä asuvat Levin ja Rukan mökkirakennusten omistajat? Maantieteellisestä jakautumisesta etäisyysmalleihin. *Matkailututkimus* vol. 4, 25–48.
- Lundmark, L. & Marjavaara, R. (2005). Second Home Localizations in the Swedish Mountain Range. *Tourism* vol. 53, 3–16.
- Löfgren, O. (1999) *On Holiday: A History of Vacationing*. University of California, Berkley.
- Moilanen, P. (2001) Recreational Fishing. In: *Finnish Fishery Time Series*. Finnish Game and Fisheries Research Institute. Official Statistics of Finland SVT. Agriculture, Forestry and Fishery 2001, vol. 60, 1–112.
- Müller, D.K. (1999) *German Second Home Owners in the Swedish Countryside: On the Internationalization of the Leisure Space*. Department of Social and Economic Geography, Umeå.
- Müller, D.K. (2002): German second home development in Sweden. In Hall, C.M. & A.M. Williams (eds.): *Tourism and Migration: New Relationships between Production and Consumption*, 169–185. Kluwer, Dordrecht.

- Müller, D.K. (2005): Second home tourism in the Swedish mountain range. In C.M. Hall, C.M. & S. Boyd (eds.): *Nature-based Tourism in Peripheral Areas: Development or Disaster?* 133–148. Channel View, Clevedon.
- Müller, D.K. (2007): Second homes in the Nordic countries: between common heritage and exclusive commodity. *Scandinavian Journal of Hospitality and Tourism* vol. 7, 193–201.
- Nieminen, M. (2004) Kesämökkibarometri 2003. [The Barometer of Free-time Residences 2003]. Ministry of the Interior, Island Committee & Statistics of Finland.
- Nordin, U. (1993) Second homes. In Aldskogius, H. (ed.): *Recreation, cultural life and tourism*, 72–79. National Atlas of Sweden. SNA, Stockholm.
- Pitkänen, K. & R. Kokki (2005) Mennäänkö mökille? Summary: Shall we visit the summer cottage? Näkökulmia pääkaupunkiseutulaisten vapaa-ajan asumiseen Järvi-Suomessa. Joensuun yliopisto, *Savonlinnan koulutus- ja kehittämiskeskuksen julkaisuja* vol. 11.
- Rannikko, P. (2009) Pistäytymismaaseutu ja avointa toivon tilaa. Summary: The dropping-in countryside and open space of hope. In Yrjölä, M. (ed.): *Kylä pysyy elossa tekohengityksellä*. Newspaper Itä-Savo 29.3.2009
- Reijo, M. & A. Juntto (2002) National characteristics remain in housing. In Pyy-Martikainen, M. (ed.): *Everyday life in EU countries. Work, income and housing in 1996*, 57–90. Statistics Finland, Living Conditions vol. 1.
- Salmi, P. & K. Muje (2001) Local owner-based management of Finnish lake fisheries: social dimensions and power relations. *Fisheries Management and Ecology* vol. 8, 435–442.
- Salmi, P., A.-L. Toivonen & J. Mikkola (2006) Impact of summer cottage residence on recreational fishing participation in Finland. *Fisheries Management and Ecology* vol. 13, 275–283.
- Sievänen, T. ja E. Pouta 2002. Kesämökki - portti luontoon. Summary: The summer cottage - a gate to nature. In Saarinen, J. & J. Järviluoma (eds.): *Luonto mat-kailukohteena: virkistystä ja elämyksiä luonnosta*, 177–190 *Metsäntutkimuslaitoksen tie-donantoja* vol. 866.
- Sievänen, T., E. Pouta & M. Neuvonen (2007) Recreational home users: Potential clients for countryside tourism? *Scandinavian Journal of Hospitality and Tourism* vol. 7, 223–242.
- Sipponen, M. and M. Muotka (1998). Factors effecting the demand for recreational fishing opportunities in Finnish lakes during the 1980s. *Fisheries Research* vol. 26, 309–323.
- Statistics Finland (2005) *Statistical Yearbook of Finland 2005*. Official Statistics of Finland, vol. 100 (new series). Gummerus Kirjapaino Oy, Jyväskylä.
- Statistics Norway (2005) *Building Statistics 2004 – Statistics of Existing Buildings at January 2005*. Official Statistics of Norway (NOS D 336). Kongsvinger, Oslo.
- Statistisk sentralbyrå (2005) Levekårsundersøkelsen 2004. <http://www.ssb.no/emner/07/02/50/fritid/tab-2005-10.21-01.html> (in Norwegian)
- Stynes, D.J., J. Zheng & S.I. Stewart (1997) *Seasonal homes and natural resources: Patterns of use and impact in Michigan*. General Technical Report NC-94. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station.
- Toivonen, A.-L. (2006) Suomi kalastaa 2005 – Kalastusrasitus kalastusalueilla. *Kala- ja riistaraportteja* vol. 390, 1–55.
- Toivonen, A.-L., H. Appelblad, B. Bengtsson, P. Geertz-Hansen, G. Gudbergsson, D. Kristoffersson, H. Kyrkjebø, S. Navrud, E. Roth, P. Tuunainen, & G. Weissglas (2000) Economic value of recreational fisheries in the Nordic countries, *TemaNord* vol. 604.
- Tuulentie, S. (2007) Settled tourists: Second homes as a part of tourist life stories. *Scandinavian Journal of Hospitality and Tourism* vol. 7, 281–300.