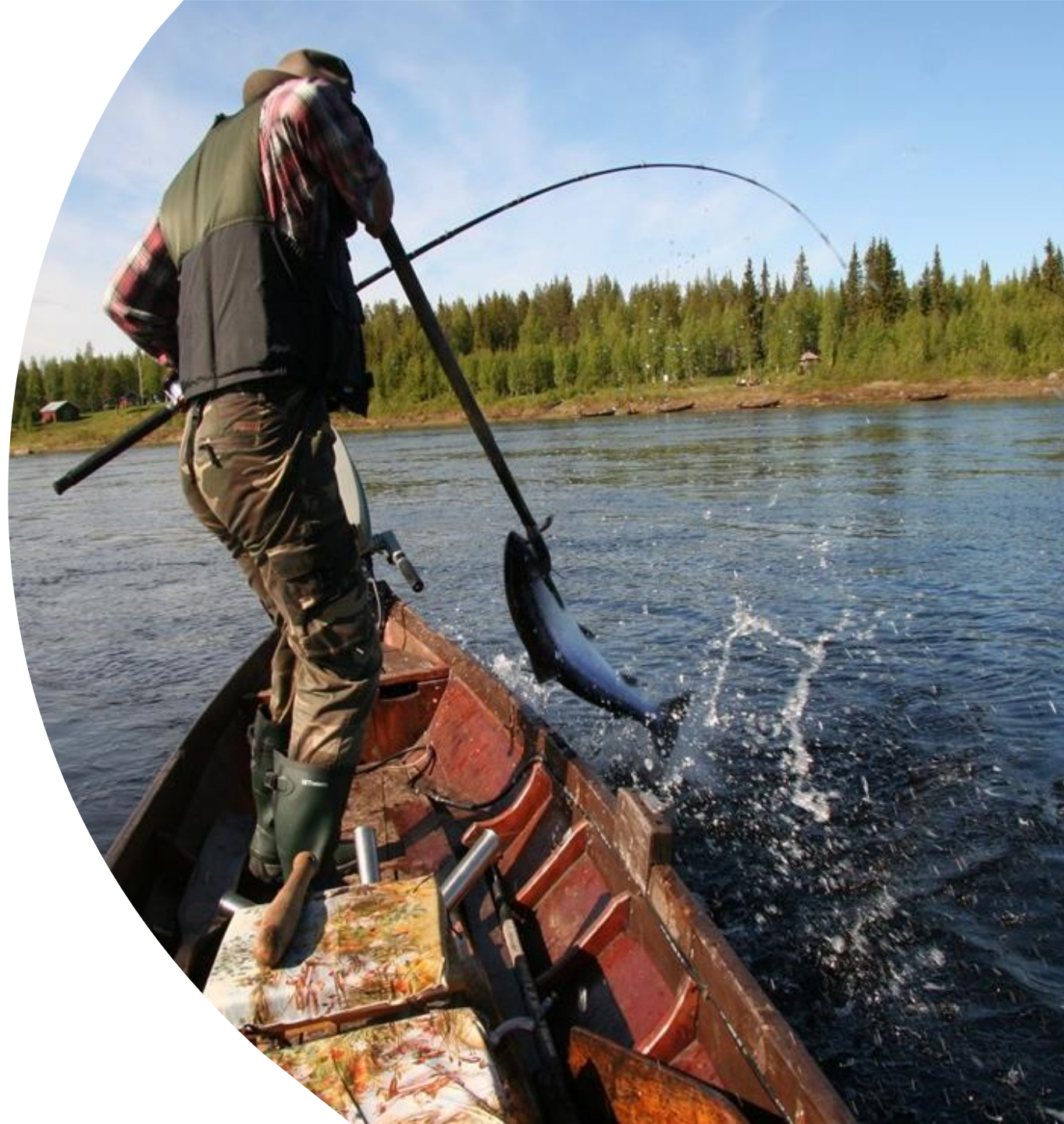


Recreational fishing value and regional economic impact

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Natural Resources Institute Finland

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Outline

Whose values?
(profiles of
recreational
fishermen)

Where values?
(travelling of
recreational
anglers)



**Regional
economic
impacts of
recreational
angling**

What values?
(personal costs
of recreational
angling)

Whose values?

Among registered fishers we have...
(Pellikka & Eskelinen 2018):

Gill net enthusiasts

At age category 56–64 (63%)
Often men (86%)
Very rarely travel
Fishing days > 20 per year (61%)
Active as "stewards"

Active generalists

middle-aged and older (85%)
Often men (92%)
domestic traveller (abroad <10%)
fishing days > 50 (36%)
Target species: pike, perch,
pike perch, whitefish...

Casual generalists

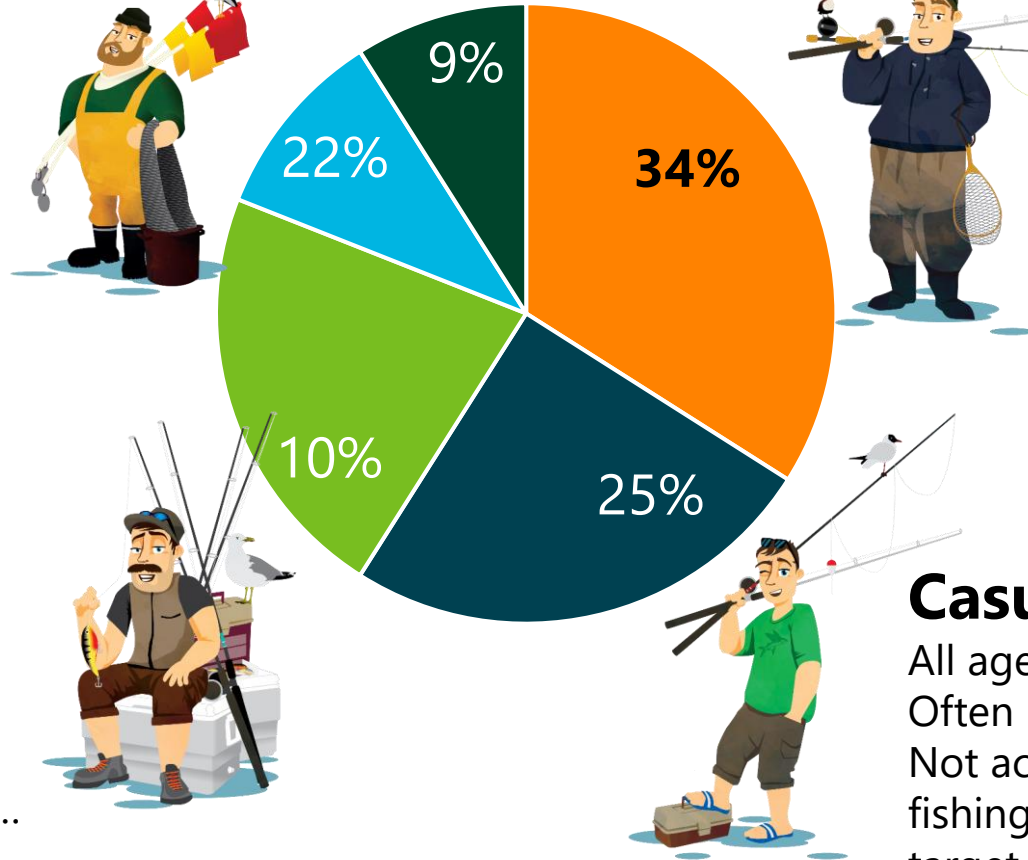
old-aged (55%)
relatively often women (17%)
fishing days < 10 (48%)
target species: infrequently perch,
pike, (whitefish)

Active anglers

young or middle-aged (58%)
Very often men (94%)
active traveller (incl. abroad 17%)
fishing days 10-39 (79%)
target species: pike, perch, pike
perch, trout...

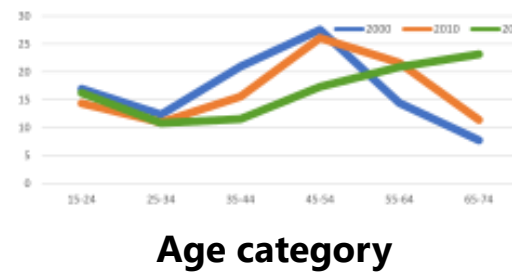
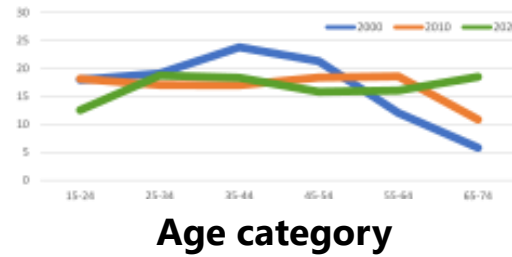
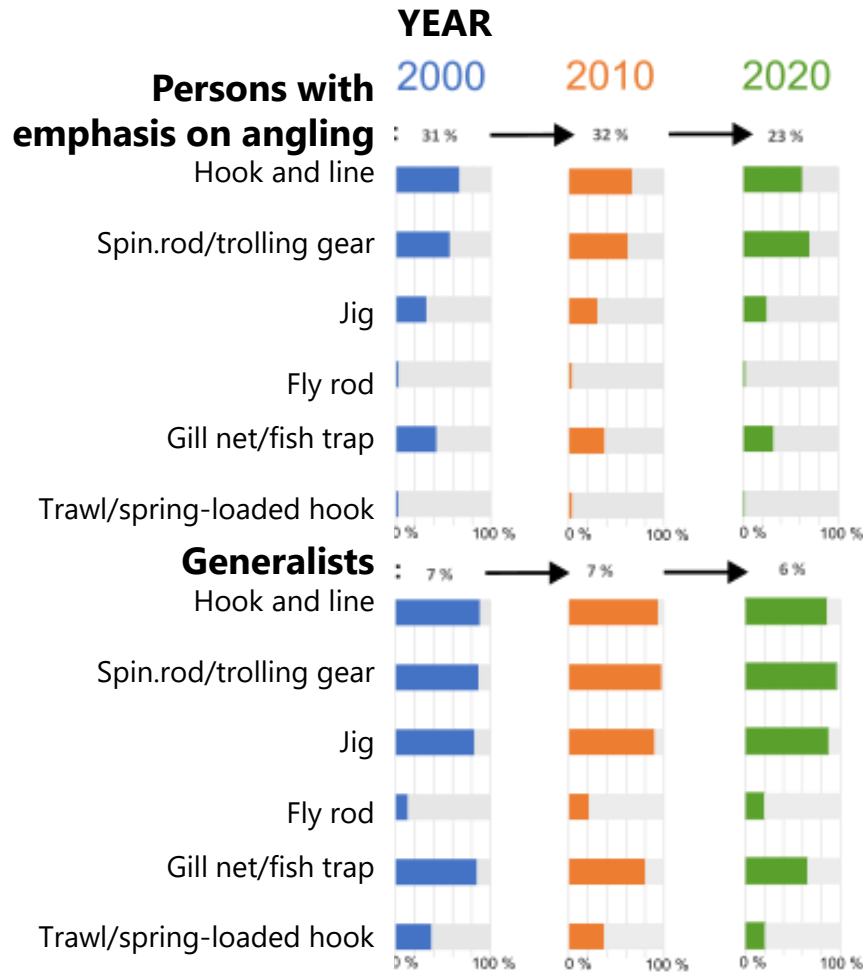
Casual anglers

All ages
Often men (89%)
Not active traveller
fishing days < 10 (88%)
target species: pike, perch, (pike
perch)



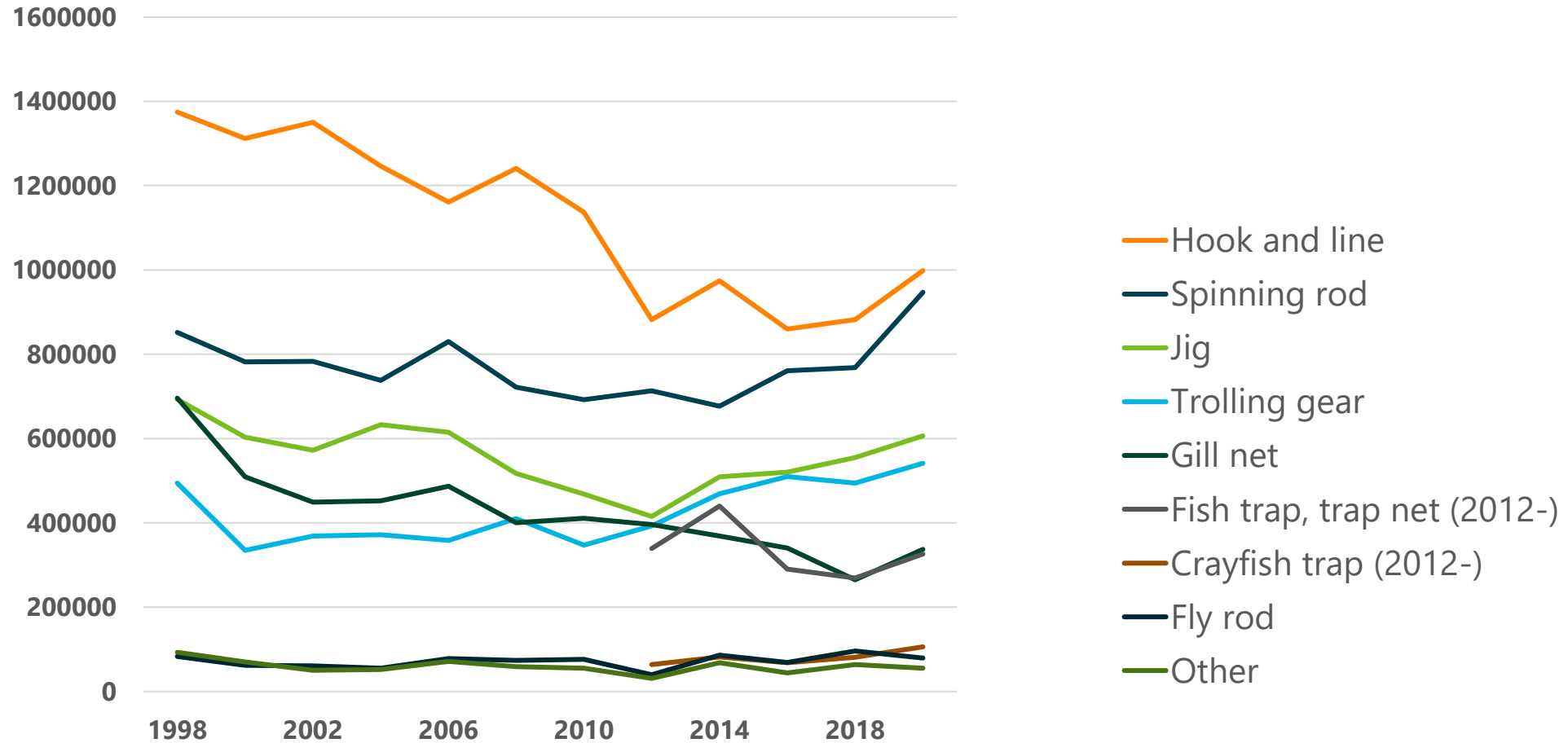
Trends in fisher (gear) profile changes in 2000s'

(Pellikka et al. 2023):



- Clearly the **relatively most common among profiles** (while number is decreasing)
- **Average age is increasing**
- **Maintained it's share** among profiles
- The group most likely to maintain the **diversity of the old fishing culture**
- **Heavily aged** segment!

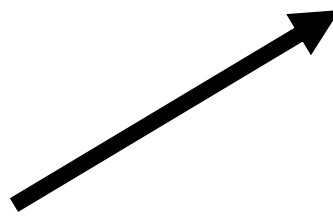
Trends in the number of Finnish fishers by gear



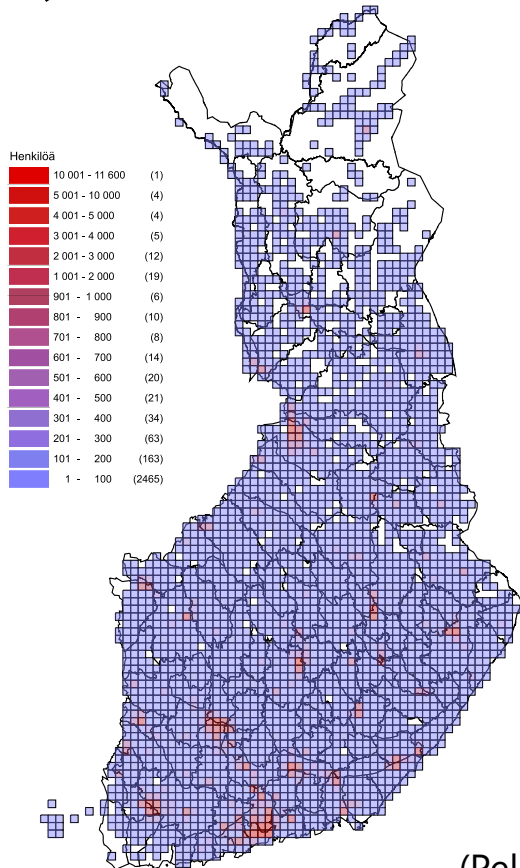
Source: Natural Resources Institute Finland, Recreational fishing

Where values?

Travelling:
(year 2018)



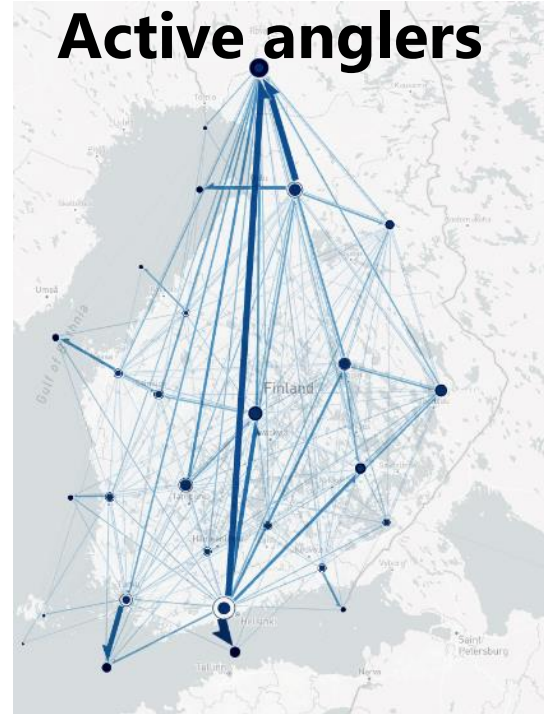
Place of
Residence
(year 2023,
registered
fishers)



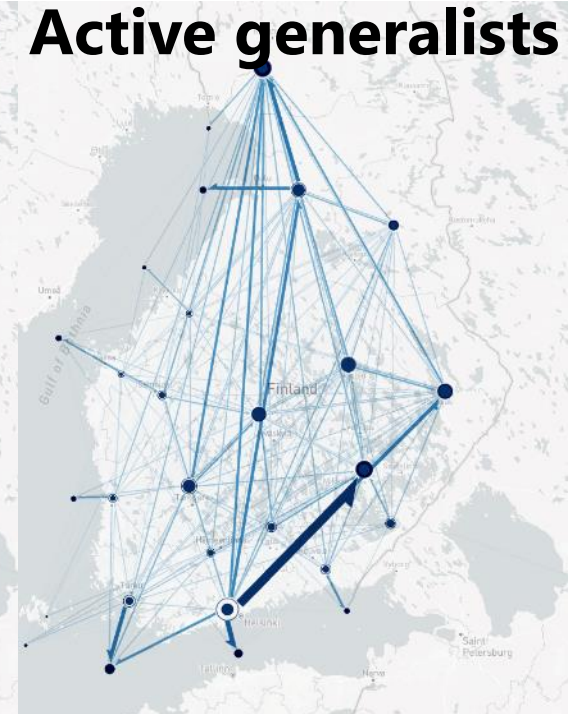
(Pellikka et al. 2021, 2023)



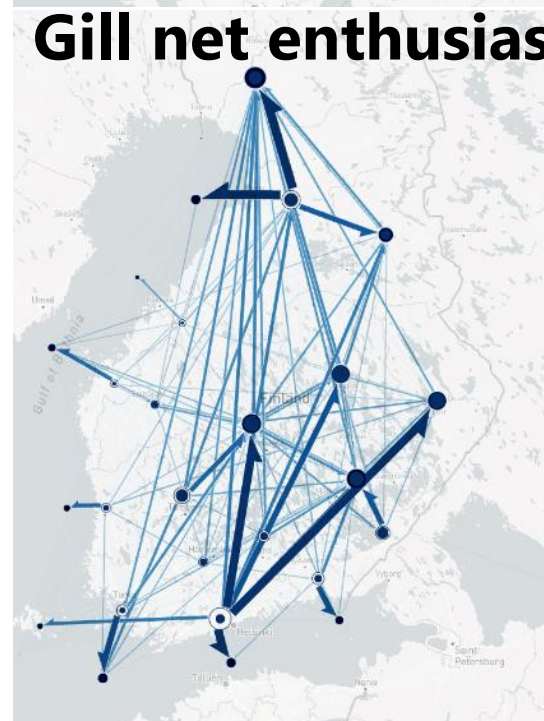
Active anglers



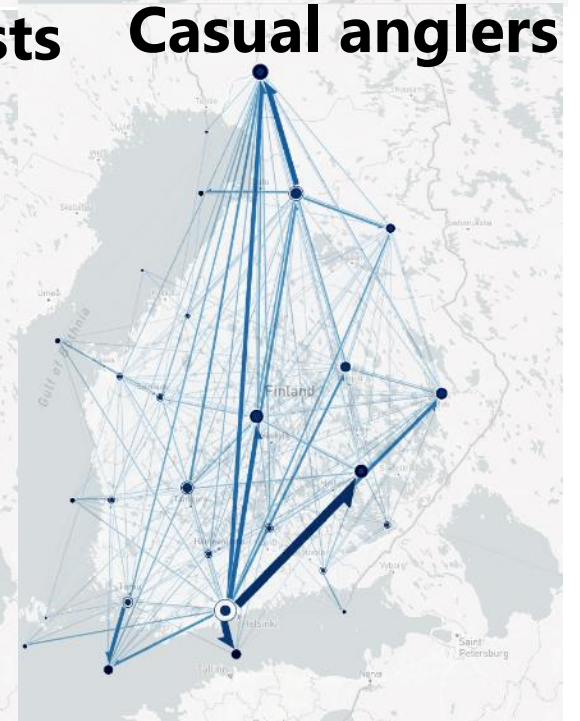
Active generalists



Gill net enthusiasts



Casual anglers



The specialization trends in 2000s'

Percentage of persons fishing with only one type of fishing gear (out of 6 alternatives),
AND use it actively (at least 10 times/year) in fishing.

Method/gear	2000 (overall 12,1 %)	2010 (overall 8,1 %)	2020 (overall 8,2 %)	Demographics predictors, e.g. (increase probability to belong)
Hook and line	4,7 % (4,1-5,3 %)	3,4 % (2,9-4,0 %)	2,6 % (2,8-4,0 %)	Female Age > 64 years Other than academic educations Lives in Southern Finland
Gill net, fish trap, trap net	4,1 % (3,6-4,7 %)	2,8 % (2,3-3,4 %)	3,0 % (2,4-3,7 %)	Female Age > 64 years Lives in rural areas Academic education
Spinning rod or trolling gear	2,6 % (2,2-3,1 %)	1,8 % (1,4-2,3 %)	3,3 % (2,6-4,0 %)	Male Age < 65 years Lives alone or in small households

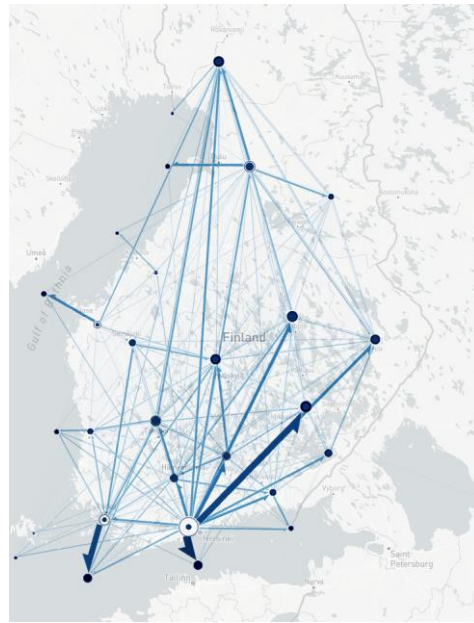
Travelling of registered and unregistered fishers in 2010s'

(Pellikka et al. 2021)

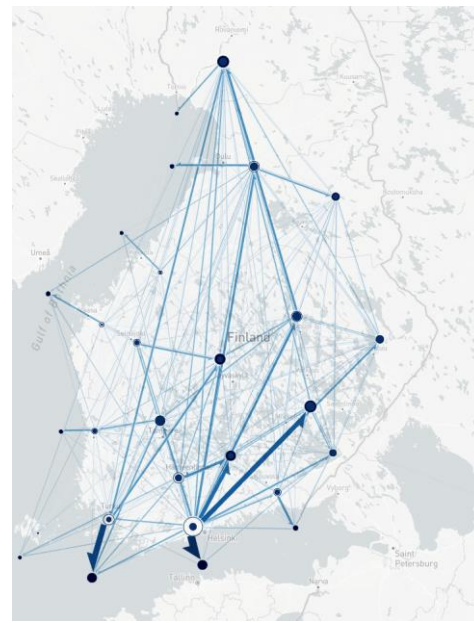
2010



2012



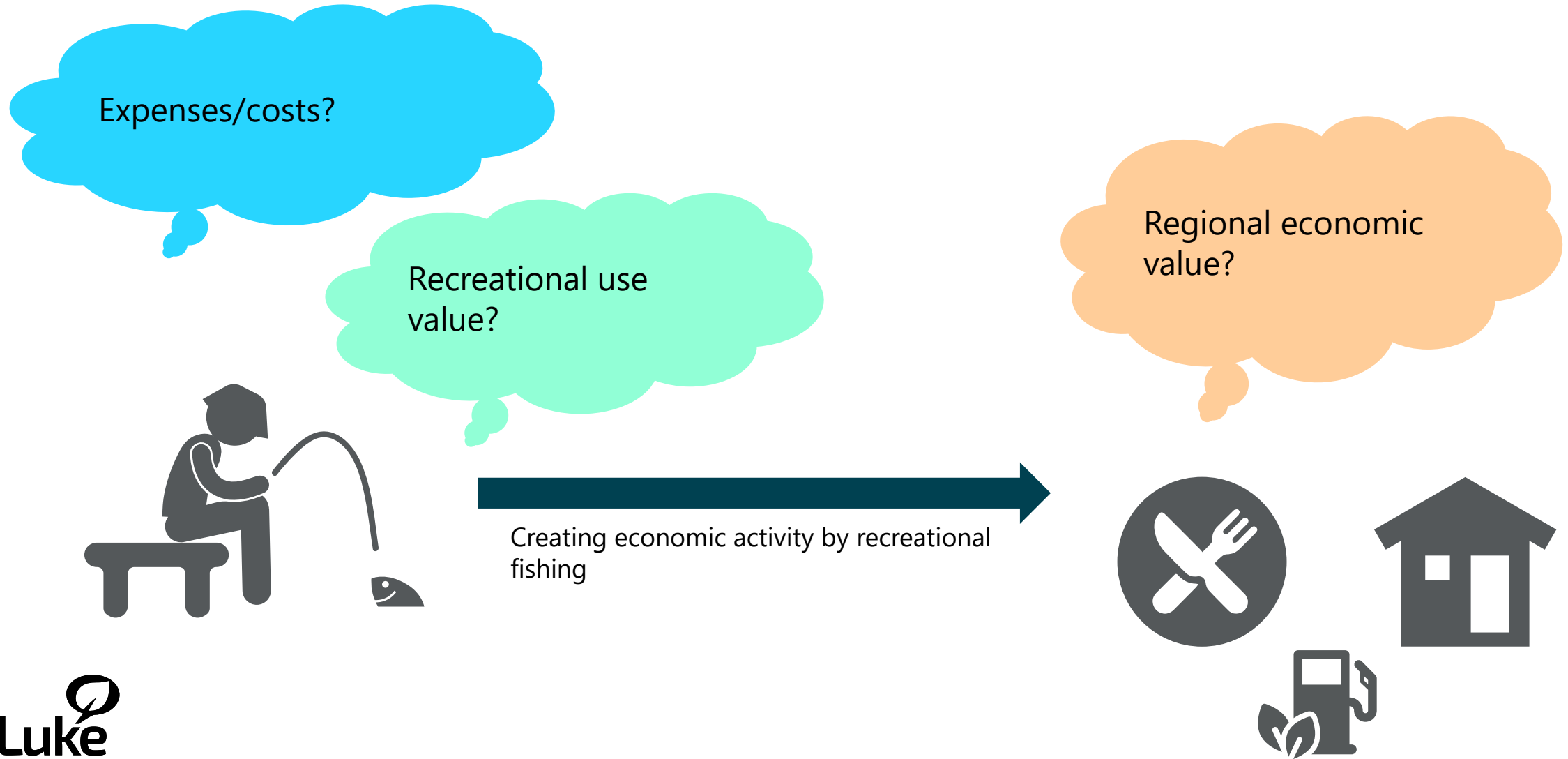
2014



2016



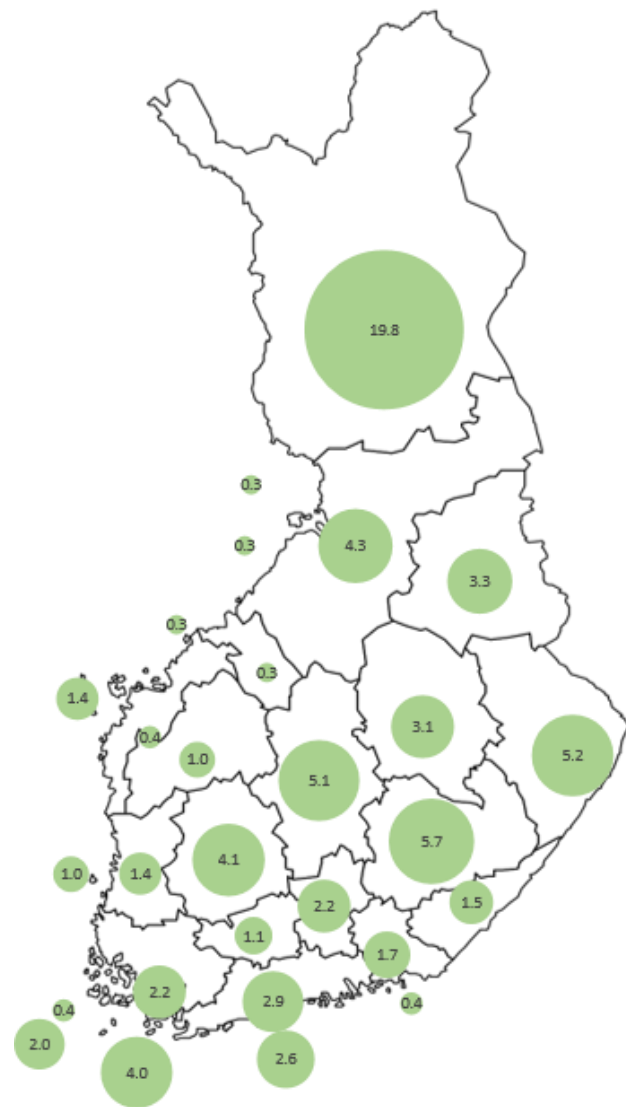
What values – economic values



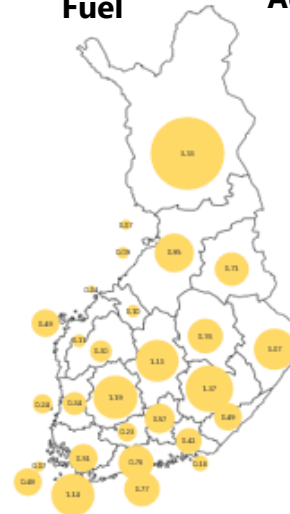
Registered recreational fishers expenses in 2023

(Pokki et al. 2023)

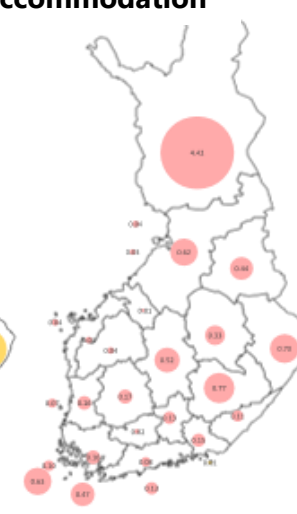
Total expenses



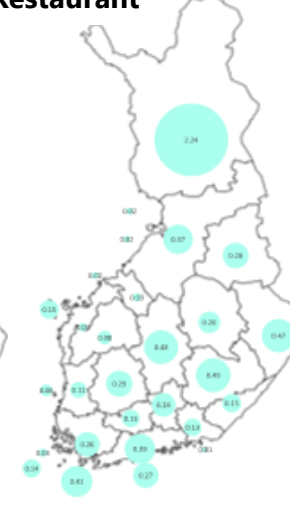
Fuel



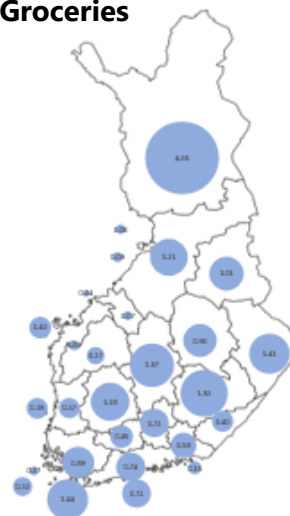
Accommodation



Restaurant



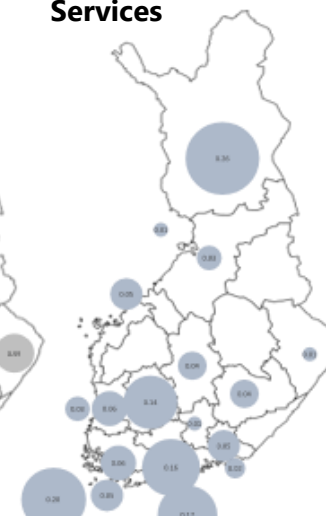
Groceries



Permits



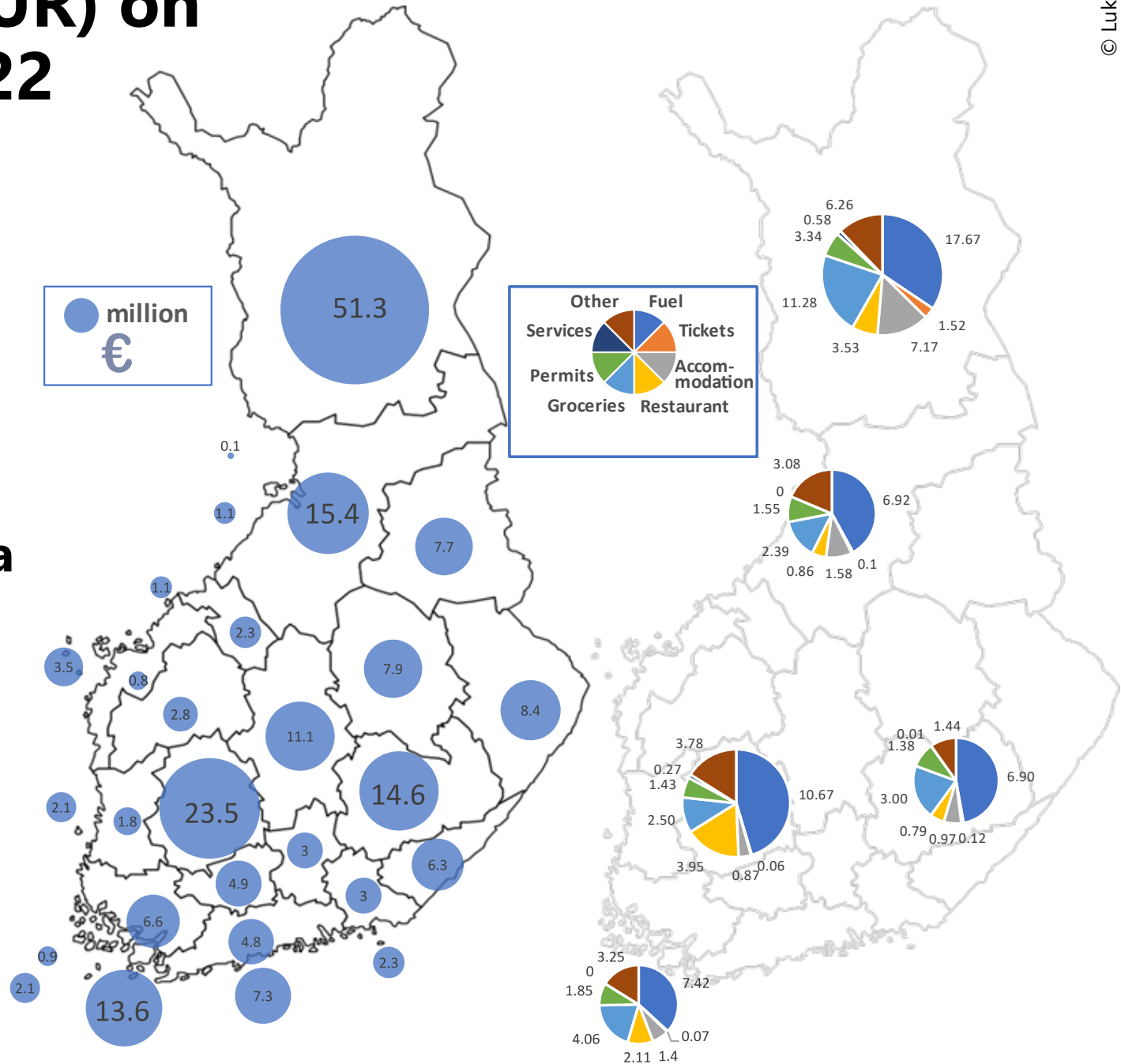
Services



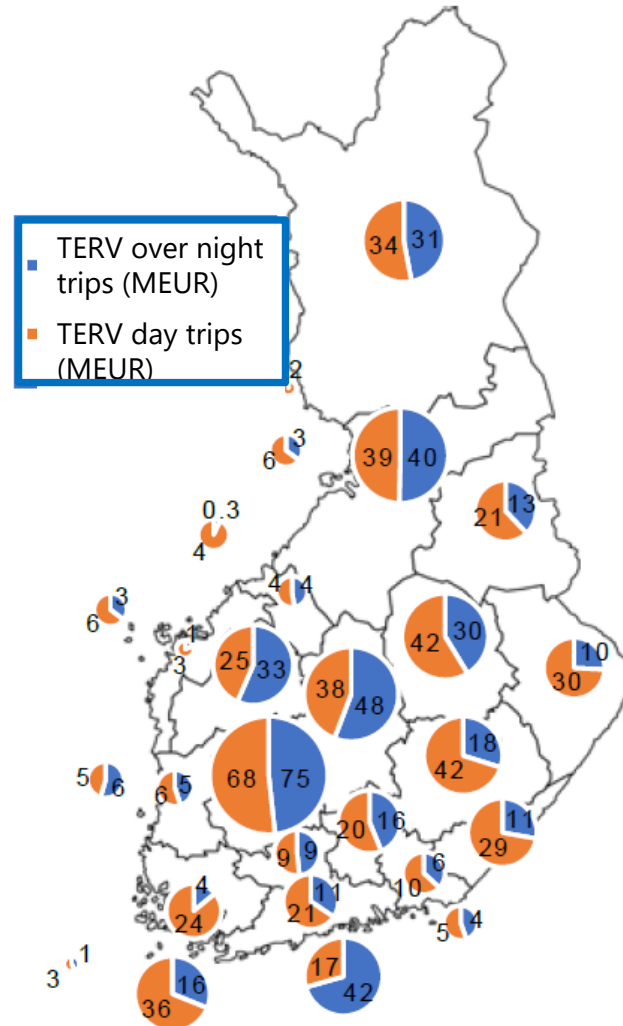
Household expenses (MEUR) on recreational fishing in 2022

(Pokki et al. 2024)

1. Lapland
2. Pirkanmaa
3. North Ostrobothnia
4. South Savo
5. Southwest Finland

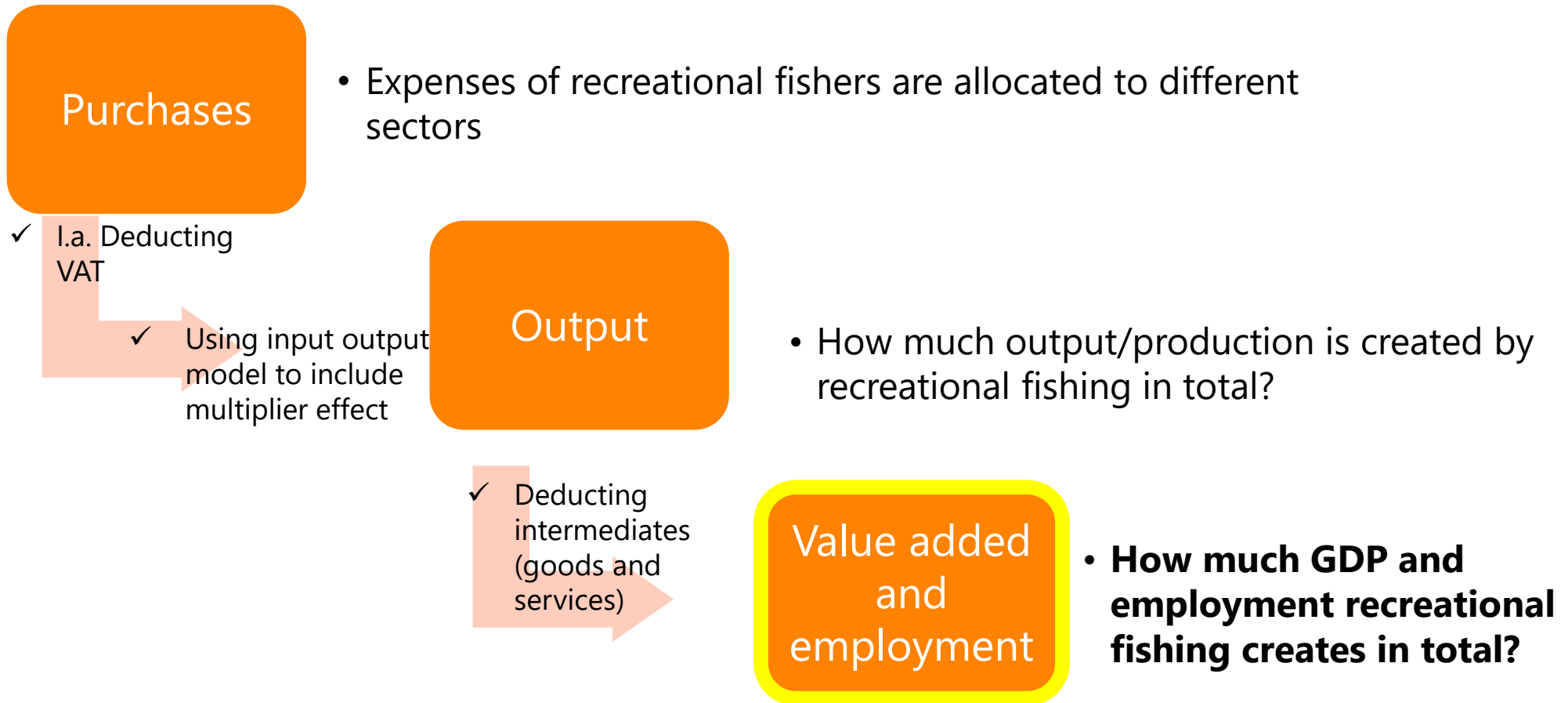


Total economic recreational value of fishing (MEUR) in 2022



- The value of one day fishing trip=61 €.
- The value of overnight fishing trip=115 €.

Regional economic impact



Purchases by recreational fishing (1000 e) in 2022

	Retail	Transport	Accommodation	Restaurant	Other services	Total
Finland	152500	3300	17900	17100	19300	210100
Lapland	35194	1523	7171	3533	3916	51336
South Savo	11345	120	971	792	1394	14622
Pirkanmaa	16948	62	871	3946	1693	23519
Southwest Finland	14739	75	1392	2114	1851	20171
North Ostrobothnia	12394	100	1572	865	1543	16474

Output created by recreational fishing (1000 e) in 2022

	Retail	Transport	Accommodation	Restaurant	Other services	Total
Finland	31500	5400	31700	26300	24400	119300
Lapland	5557	1014	7240	3653	3974	21438
South Savo	1427	48	1056	850	1390	4770
Pirkanmaa	2320	29	1189	4375	1860	9772
Southwest Finland	2484	45	1822	2468	1953	8772
North Ostrobothnia	1778	50	1963	1015	1608	6413

Output = gross value of production

Value added created by recreational fishing (1000 e) in 2022

	Retail	Transport	Accommodation	Restaurant	Other services	Total
Finland	16300	2100	12400	10900	12100	53700
Lapland	3032	458	2463	1294	2092	9340
South Savo	763	22	482	383	711	2360
Pirkanmaa	1225	12	488	1713	952	4390
Southwest Finland	1332	19	753	979	969	4052
North Ostrobothnia	911	21	812	404	857	3005

Value added = the share of gross domestic product (GDP)

Regional economic impact of recreational fishing in 2022

% of the total economic activity/employment of the region

	Output (%)	Value added (%)	Employment (%)
Finland	0,03	0,02	0,04
Lapland	0,14	0,15	0,29
South Savo	0,06	0,06	0,10
Pirkanmaa	0,02	0,02	0,04
Southwest Finland	0,02	0,02	0,04
North Ostrobothnia	0,02	0,02	0,03

Regional economic impact of commercial fishing and aquaculture in 2022

In Lapland and Pirkanmaa, the economic impact of recreational fishing is higher than that of commercial fishing and aquaculture combined.

	Output (%)	Value added (%)	Employment (%)
Finland	0,05	0,06	0,06
Lapland	0,07	0,17	0,16
South Savo	0,10	0,13	0,14
Pirkanmaa	0,01	0,01	0,01
Southwest Finland	0,07	0,14	0,12
North Ostrobothnia	0,05	0,10	0,10

Recreational fishing economic impact



54 MILLION VALUE ADDED € **1021** JOBS (GDP)

TURNOVER OF INDUSTRIES GROWS :



Retail / trade

153 million €



Land and air-transport

3.3 million €



Recreational services

19.3 million €

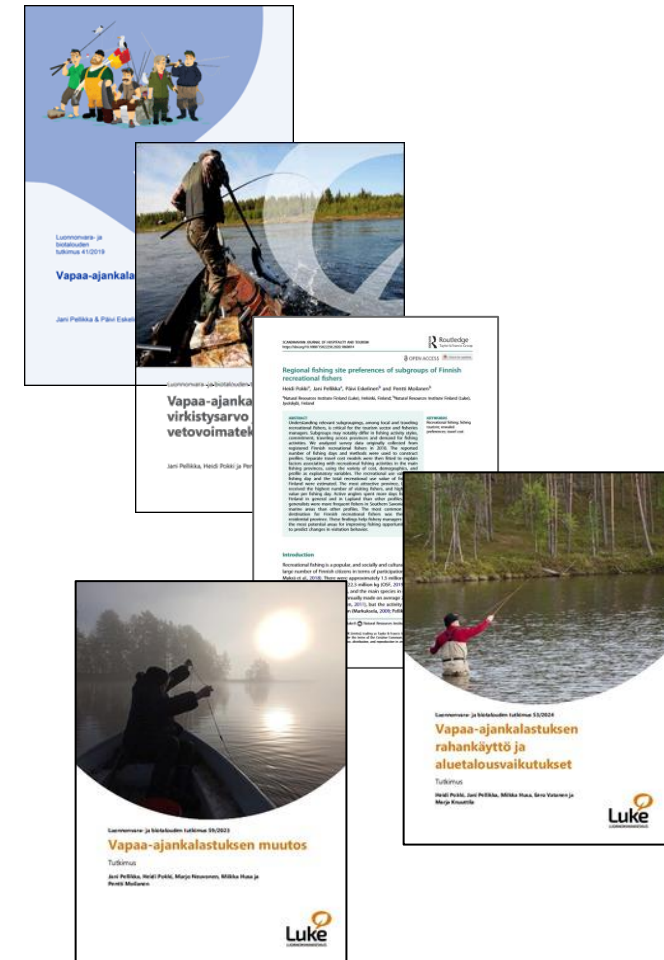


Accommod. / catering

35 million €

Additional information:

- Pellikka, J. & Eskelinen, P. 2019. Vapaa-ajankalastajien profiilit. Luonnonvara- ja biotalouden tutkimus 41/2019. (in Finnish)
- Pellikka, J., Pokki, H. & Moilanen, P. 2021. Vapaa-ajankalastuksen virkistysarvo ja vetovoimatekijät. Luonnonvara- ja biotalouden tutkimus 60/2021. (in Finnish with Swedish and English abstracts).
- Pokki, H., Pellikka, J., Eskelinen, P., & Moilanen, P. 2021. Regional fishing site preferences of subgroups of Finnish recreational fishers. *Scandinavian Journal of Hospitality and Tourism*, 21(4), 442-457.
- Pellikka, J., Pokki, H., Neuvonen, M., Husa, M. & Moilanen, P. 2023. Vapaa-ajankalastuksen muutos : Tutkimus. Luonnonvara- ja biotalouden tutkimus 59/2023. (in Finnish)
- Pellikka, J., Mikkola, J. & Husa, M. 2024. Viehekalastusta kalatalousalueilla : Selvitys. Luonnonvara- ja biotalouden tutkimus 10/2024 (In Finnish)
- Pokki, H., Pellikka, J., Husa, M., Vatanen, E. & Knuuttila, M. 2024. Vapaa-ajankalastuksen rahankäyttö ja aluetalousvaikutukset : Tutkimus. Luonnonvara- ja biotalouden tutkimus 53/2024 (in Finnish with English abstract).



Thank you!



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