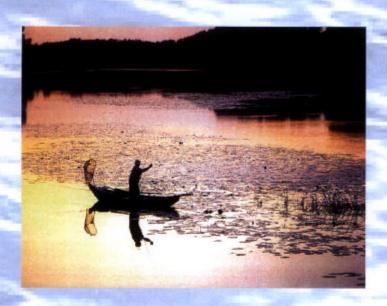
Data from Actual Surveys

Social and Economic Value of RECREATIONAL FISHING



Northern and Central Europe





EUROPEAN ANGLERS ALLIANCE



Compiled by Dr. Kohl, Research Consultant on behalf of ÖKF and EAA © 2002

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Dear Reader!

Recreational angling is one of the very few activities which is carried out in the same way as thousands of years ago, when man lived in harmony with nature. Then, as now, the essentials were rod, hook and line.

The physical and psychological recreation which millions of people find in fishing is a value in its own right. The beneficial effect of real recreation in the natural world can hardly be rated highly enough. Additionally, anglers provide a decisive contribution to the well being of the aquatic environment, either directly by their engagement in protection and revitalisation of lakes and rivers, or indirectly by their licence fees (which ensure an economic interest in keeping water bodies as a habitat for aquatic flora and fauna).

In the United States recreational angling is already fully recognised as an important social, economic and ecological factor. The estimated number of US anglers is about 50 million. More people fish than play tennis or golf combined. The economic impact exceeds 100 billion dollars. In the US, and also in Australia, governmental institutions have commissioned a lot of research on recreational fishing. In Europe we sometimes lack even the most fundamental figures like number of anglers. Therefore the European Anglers Alliance has started an initiative to assess, at last, reliable and comparable basic facts and figures about angling in Europe.

This summary reports on surveys done in nine countries. The five "Nordic Countries" are covered fully; the four other countries Switzerland, Bavaria, Austria and Hungary represent a geographically coherent region in the heart of continental Europe. The Board of EAA expresses its thanks to all who have made these surveys possible and especially to Franz Kohl (ÖKF / Austria) who has compiled this international summary.

Even though surveys in the most highly populated countries are still in the planning stage only, what we have now already provides evidence that angling is one of the most popular recreational activities of European people.

The original reports, naturally, contain much more information than we could present in this summary brochure. If you are interested in more detail, please do not hesitate to contact the EAA or one of the contact people listed in the appendix.

Kurt Meyer (Vice President) Harm-Minekus (President EAA)



COUNTRIES SURVEYED

SWEDEN

Sept/Dec 2000 3.456 Interviews

NORWAY

Sept/Dec 2000 2.182 Interviews

FINLAND

Sept/Dec 2000 2.550 Interviews

ICELAND

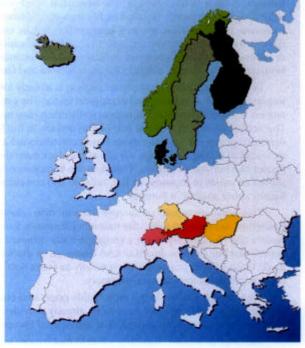
Sept/Dec 2000 840 Interviews

DENMARK

Sept/Dec 2000 2.376 Interviews

BAVARIA

March 1997 1.259 Interviews (organised anglers)



SWITZERLAND

Feb/April 1998 2.287 Interviews

HUNGARY 1999, 1.253 Interviews (organised anglers)

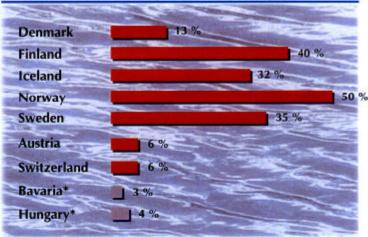
AUSTRIA

June/Aug 2000 5.492 Interviews



In these nine countries alone 7,9 million anglers





^{*} organised anglers only

An "active angler" is defined as someone who has fished at least once during the last 12 months. As to be expected, there is a higher percentage of recreational fishermen in the Nordic countries. Finland is the proverbial "Land of a Thousand Lakes" and in Sweden, Iceland, Norway and Denmark almost everybody can reach an excellent fishery - sea, lake or river - in less than an hour.

But the <u>fifty percent</u> in Norway - that's quite a surprise.

Active anglers in absolute numbers





are angles are	
Denmark	543.000
Finland	1.674.000
Iceland	65.000
Norway	1.773.000
Sweden	2.518.000
Austria	410.000
Switzerland	350.000
Hungary*	325.000
Bavaria*	250.000
TOTAL	7.908.000

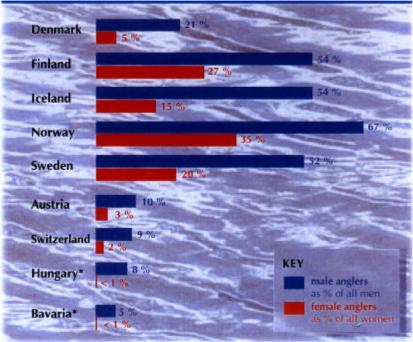


Interpretation must take into account that in some Nordic countries these figures also include "subsistence fishing" with gill nets. Conversely, the figures for Bavaria and Hungary only counted the <u>officially registered & organised</u> anglers. So the total number will be <u>well over 8 million active anglers</u>.

Surprisingly high number of female anglers

Many non-anglers think that fishing is a male-only sport.

This stereotype was probably justified in the past, but the actual survey data show a different picture. It's still male dominated, but in many countries the number of angling women already is respectably high.



^{*} organised anglers only

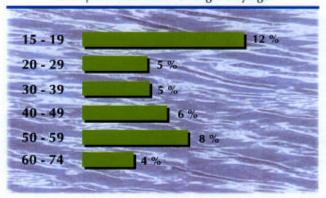
The detailed results show that female anglers go fishing less frequently - the majority being "occasional" anglers (which explains the low percentages found in Bavaria and Hungary, where only organised anglers were surveyed). They also go more often in company with friends or family, husband and children. Obviously many were encouraged by their male partners, which indicates that angling tends to become a "family sport".



Youthful up to highest age

Angling can be exercised until highest age. But it is far from being an "old" activity. On the contrary, it is the teenager category where angling participation is at its highest, by far. Exact data by age are available from Swiss and Austrian studies; for Bavaria and Hungary indirect evidence is provided by the low "starting age".

Example Switzerland: % anglers by age



In fact, children and teenagers show enormous interest in fishing. In the inland countries there are much more youngsters who would like to fish than there are fisheries available to them. The "Youth-Angling-Camps" offered by many angling clubs are regularily overbooked within days after being announced.

As the Swiss and Austrian data show, not all youth anglers continue to fish when they reach their twenties. To a large part this is simply due to the fact that more time has to be spent on career, family and domestic duties. For angling clubs this poses a double challenge.



Firstly, to cater for the many interested children and teenagers, with motivating instructions and adequate angling opportunities; secondly, when they grow older, to keep in contact and to motivate them to start again when diminishing time pressures allow it (or when their children are old enough to accompany them on angling excursions).

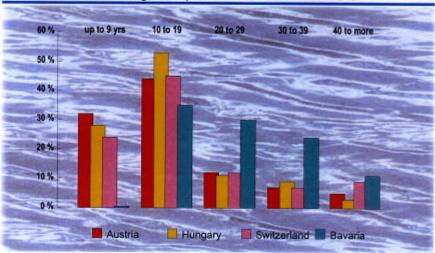


Early starts ...

The vast majority of anglers has started angling as children or in their teenage years.

In Austria and in Hungary the average starting age is 15 years, in Switzerland 18 years. For the Nordic countries (where this question was not asked) a similarily low starting age can be assumed because of the general popularity of angling and the easy access to all sorts of fisheries.

At which age have you fished for the first time (%)



Only in Bavaria was a significantly higher average starting age (of 27 years) observed. This is probably a result of the quite restrictive access rules - German laws forbid angling for children under 10 years and later a quite demanding angling exam is mandatory.





Nature and recreation more important than catch

Anglers would not go fishing on empty waters with no chance to catch. But experiencing the natural environment and recreation are more important motives than landing many fish or big fish.

Example Austria Motives for Angling (answers in %) Recreation, Relaxing main motives Exper. Nature & Water Activity with Friends Fish to Eat Catch Big Fish Catch Big Fish

Example Bavaria

Motives for Angling (answers in %)

LEGEND
In Peace and Quiet
very important
Experiencing Nature
Activity with Friends

Many Fish
Big Fish

Big Fish

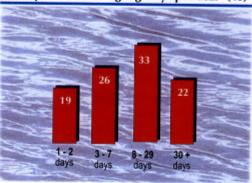
In Switzerland only a shortened list of motives was asked, results were 81% Nature, 9% Activity with Friends and only 3% Catching many Fish. In Hungary the results were: 54% for Nature, 36% Joy of Catching Fish and 19 % Pleasant Hours with Friends.



Big differences, ranging from once a year to 250 times

There are big differences between anglers regarding frequency and intensity of fishing - a common phenomenon with sporting and recreational activities. There are occasional anglers who fish only once or twice a year, and at the other end of the range we find intensive anglers who fish more than 30 days, in some cases up to 250 days per year.





Also, averages per country vary considerably. However, this is also influenced by the fact, that in the Bavarian, Hungarian and Swiss studies, this question was only asked of officially registered organized anglers whereas in Austria and in the Nordic countries the figures relate to all anglers.

It is also to be expected that in the Nordic countries, where easy access to fishing waters favours a high percentage of occasional anglers, the average number of days fished each year will be relatively small.





COUNTRY	NUMBER ANGLERS	ANGLING DAYS	
		Ø	Annual Total
Denmark	543.000	12,1	6,6 mio
Finland	1.674.000	18,8	31,5 mio
Iceland	65.000	7,9	0,5 mio
Norway	1.773.000	12,9	22,9 mio
Sweden	2.500.000	13,2	33,3 mio
Austria	410.000	23,3	9,6 mio
Switzerland*	80.000	48,0	> 3,8 mio
Hungary*	ca. 90.000	61,0	> 5,8 mio
Bavaria*	ca. 125.000	44,0	> 5,5 mio
TOTAL			> 119,4 mio

^{*)} afficially registered anglers only

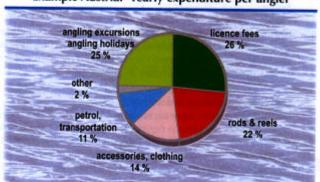


A minimum of 1.5 billion Euro

The <u>total</u> expenditure on recreational angling was measured only in the Austrian study. In Bavaria, Switzerland and Hungary the expenditure by officially registered anglers only was asked, resulting in a high mean but neglecting the large number of non-registered occasional anglers. And the Nordic surveys, while covering all anglers, refrained from asking about the expenditure for equipment and angling clothes.

Example Austria: Yearly expenditure per angler

Total expenditure 443 Euro per angler



Figures for those countries therefore represent the empirically measured minimum; for the total expenditure adequate amounts for the non-covered items must be added.

COUNTRY	#	EXPENDITURE in Euro		Remarks	
	ANGLERS	Ø per angler	Total Spend		
Denmark	543.000	157	> 85,5 mio	CATALON IN COMM	
Finland	1.674.000	156	> 261.8 mio	plus expenditure on equipment, balt, angling accessories and clothing	
Iceland	65.000	391	> 25.4 mio		
Norway	1.773.000	168	> 298.6 mio		
Sweden	2-500.000	158	> 397,8 mio		
Austria	410.000	443	181,5 mio	Electronic Control	
Switzerland*	80.000	1.769	> 141,5 mio		
Hungary*	ca. 90.000	231	> 21,9 mio	plus the expenditure of non-registered anglers	
Bavaria*	ca. 125.000	564	> 70,6 mio		
TOTAL			> 1.484,6 mio		

^{*)} officially registered anglers only

An added value of 1.5 billion Euros is equivalent to 50.000 jobs.



APPENDIX



Nordic Countries

Publication

Toivonen, Anna-Liisa, Appelblad, Hakan, Bengtson, Bo et al., Economic Value of Recreational Fisheries in the Nordic Countries, TemaNord 2000-604, Nordic Council of Ministers, Copenhagen 2000. ISBN 92-893-0551-7

Scope

This large-scale study was designed to cover all five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) with identical methodology. It was commissioned and financed by the Nordic Council of Ministers and was planned and executed by an interdisciplinary team of researchers from universities in all five countries.

Survey methodology and timing

Mail survey within separate random samples for each country, drawn from national population registers, representative for whole population from 18 - 69 years. Fieldwork took place from September 1999 to January 2000. Response rates were rather high, ranging from 34% in Iceland to 51% in Finland; the average response rate was 46%.

Sophisticated research concept

The research is based on an exceptionally thoroughly discussed theoretical concept of measuring "Total Value" by using the Contingent Valuation (CV) method. Details of this sophisticated concept were published in a separate methodology report. The main idea, however, can be summarised as follows: When talking about the total value and benefit of recreational angling it is not enough to look at the effective expenditure; one must also consider the willingness to pay more to have this recreational experience.

Special results: High willingness to pay more

On average across the five countries the recreational anglers would be willing to spend an additional 47% over their actual expenditure.

Actual expenditure (excl. equipment) Willingness to pay more	1.070 million Euro 504 million Euro
Total value of recreational fishing	1.574 million Euro



There are good reasons to expect that results would be similar also in other countries where this aspect has not yet been researched.



Publication

Schwärzel-Klingenstein, Jöri, Lüthi, Brigitte and Weiss, Thomas: Angeln in der Schweiz, Klosters 1999.

Scope, methodology and timing

This study was commissioned by EAA and the SFV (Schweizerischer Fischereiverband) with support from BUWAL (Swiss Bundesamt für Umwelt, Wald und Landschaft). The survey was decigned in two classes (1) Talanhana periodis by decigned in two classes (1) Talanhana



Publication

Kohl, Franz: Soziale und ökonomische Bedeutung der Angelfischerei in Österreich, Vienna 2000/01.

Scope, methodology and timing

This study was planned and commissioned by ÖKF (Österreichisches Kuratorium für Fischerei und Gewässerschutz) with financial support from several regional angling bodies. The survey used a standard telephone omnibus (CATI), representative for the Austrian population over 14 years of age, fieldwork June-September 2000. The assessment of percentages of active anglers and ex-anglers was based on a total sample of 5.482 interviews, 336 active anglers were interviewed in-depth. Additionally some key questions were included for ex-anglers (200) and non-anglers (722).

Special results: 27% have angling experience, good image of angling

Additionally to the 6,3% active anglers there are 21% with former angling experience, and one quarter of them have the intention to start fishing again! Many non-anglers have anglers in their family. Image of anglers regarding water protection and respect for nature is clearly positive.



APPENDIX



Bavaria

Publication

Lederer, Mathias: Die sozio-ökonomische Bedeutung der Angelfischerei in Bayern, Diplomarbeit (Thesis) an der Techmischen Universität München, Abteilung Fischbiologie. München 1997. Sponsored by the Angling Federation of Bavaria / Landesfischereiverband Bayern e. V. (supervision Prof. Dr. Herbert Stein).

Methodology

Mail survey, representative for <u>organized</u> Bavarian anglers = members of regional branches of VDSF (Verband Deutscher Sportfischer). Fieldwork took place in March 1997, the differentiated and well pretested self-completion questionnaire was sent to a random sample of 2.000 anglers, an exceptionally high redemption rate of 63% was reached, yielding a final sample of 1.259 fully completed interviews.

Special results: 31% make angling holidays, spending 723 Euro each

31% of organized Bavarian anglers make angling holidays, with average costs of 723 Euro per year. Angling tourism accounts for 40% of total angling expenditure, with a fairly even split between German destinations (45%) and angling holidays in foreign countries (55%).



Hungary

Publication

Kovacs, Norbert and Füresz, György: A socio-ecologic survey on fishing in Hungary, Budapest 1999. The study was planned and sponsored by HORGASZ, the National Federation of Hungarian Anglers.

Methodology

Mail survey, questionnaires were published in Magyar Horgász magazine, the official magazine of the Federation of Hungarian Anglers; additionally questionnaires were distributed by local Federations to their members. 1.253 completed questionnaires were sent back. (Probably, as usual with this type of sampling, with overproportional representation of especially interested persons = intensive anglers).





50% take part in 2-3 days angling excursions, predominantly staying overnight in tent/caravan or with friends/relatives. Within the past five years, 51% have also made longer angling holidays (more than 4 days), mostly within Hungary, but also abroad (mainly Rumania, Croatia).

EAA Headquarter

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Tel: +49 6985 5006

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Other EAA Countries

For information about EAA in general and for addresses of other EAA-member countries please contact the EAA Headquarter Office.





The European Anglers' Alliance is a pan-European organisation, which represents the national angling organisations of 18 European countries and over 6 million affiliated anglers.

OUR MISSION

To safeguard the fish stocks and fisheries of Europe and to protect the interests of all those who fish with rod and line for recreational purposes

> The EAA has a permanent office in Brussels, its statutes are registered in Strasbourg and it is officially recognised as a non-governmental organisation by the European Commission.

> Member nations per September 2002: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Macedonia, The Netherlands, Norway, Poland, Slovenia, Sweden, Switzerland, United Kingdom.