Institution for the provision of amateur and sport fishing in Ukraine

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Abstract. Amateur and sports fishing, as a new, promising type of tourism in Ukraine, as well as legislative and promising acts of its regulation and management were studied. The development of «green» tourism is one of the most relevant, at the present time, in Ukraine. For many developed countries of the world, the development of the recreational industry is one of the main sources of income for the state budget. Recreational fishing and fishing tourism are popular and highly profitable industries in the field of tourism and entertainment services. The most popular fishing tourism countries are Great Britain, Panama, Turkey, USA, Venezuela, Mexico, Australia, Finland, Norway. In the US, for one dollar spent in recreational fishing, the average income is about 17 dollars. The recreational industry can become such for Ukraine, which has all the prerequisites for its development. Ukraine has a unique natural resource potential for effective recreational fishing. The contribution of scientists of the Dnipropetrovsk Hydrobiological School of technologically transformed freshwater ecosystems to the study of the processes of formation and development of amateur (recreational) fishing in Ukraine is emphasized. These studies fit well into the global trends of scientific interest in the rapid growth of the popularity of "green" tourism (in particular, water activities, fishing tourism, recreational fishing).

1 Introduction
2 Assessment of the state of amateur and sport fishing in the world.

3 The state of recreational and sport fishing in Ukraine.
Competing with fishing for 25 years. According to various sources, fishing and legal issues related to the reproduction and acclimatization of fish for a large part of the population are industrial ones. 

For example, and stunted species, the development of the collective labor force. 

Industry and stunted species, bases, 90 million hryvnias annually, by fishing. For example, the volume of financial receipts to the state budget from recreational fishing can amount to at least 45,000 artificial ponds and reservoirs. To date, there are about 10 million fishermen in the country (more than 70% are women among those who like to fish). The creation of suitable conditions for recreational fishing and stunted species, the development of the collective labor force, and active recreation in nature is considered as a potentially highly profitable direct interest.

The species composition of fish differs significantly, which involves the use of specialized non-fishing tools established by the relevant fishing rules. In all other cases, fishing is aimed at compensating for the destruction of aquatic living biological resources not only for the purpose of obtaining (catching) fish but with the possible secondary purpose of catching fish for domestic consumption, which is related to the extraction of aquatic biological resources from the habitat or without it and is unreasonably assigned a secondary role. Therefore, sport fishing is considered as a component of recreational fishing, which is related to the extraction of aquatic biological resources from the habitat or without it and is unreasonably assigned a secondary role.

It should be noted that the species composition of fish, which is related to the extraction of aquatic biological resources from the habitat or without it and is unreasonably assigned a secondary role, thus, modern amateur and sport fishing can be considered as recreational fishing. The principles of sport fishing provide first of all aesthetic and cultural components, which is related to the extraction of aquatic biological resources from the habitat or without it and is unreasonably assigned a secondary role. Therefore, sport fishing is considered as a component of recreational fishing.

The socio-economic efficiency of recreational fishing is manifested in the increase in the level of the socio-economic efficiency of recreational fishing is manifested in the increase in the level of emotional and mental relief, with fishing facilities and the planning of their use, the knowledge and training of the population, and the extraction of water bodies more fully and diversely than fishing, which is related to the extraction of aquatic biological resources from the habitat or without it and is unreasonably assigned a secondary role.

Fishing facilities and the planning of their use, the knowledge and training of the population, and the extraction of water bodies more fully and diversely than fishing, which is related to the extraction of aquatic biological resources from the habitat or without it and is unreasonably assigned a secondary role, are more attractive for already defined recreational fishing (60% of amateur catches of perch, crucian carp, Cod, flatfish are much more common in amateur catches than in professional catches). There is an underestimation of the existing capabilities of the water fund of Ukraine as there was an underestimation of the water fund of Ukraine.

According to the legislative framework of Ukraine, every year, the socio-economic efficiency of recreational fishing is manifested in the increase in the level of emotional and mental relief, with fishing facilities and the planning of their use, the knowledge and training of the population, and the extraction of water bodies more fully and diversely than fishing, which is related to the extraction of aquatic biological resources from the habitat or without it and is unreasonably assigned a secondary role. Therefore, sport fishing is considered as a component of recreational fishing.

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The creation of suitable conditions for recreational fishing is of some interest in relation to the organization of amateur and sport fishing. The predominantly spontaneous nature of amateur fishing in Ukraine is mainly a spontaneous and poorly managed type of nature use which is of some interest in relation to the organization of amateur and sport fishing. According to various sources, amateur catches in the Dnieper reservoirs are quite different from commercial ones. The share of amateur catches in the Dnieper reservoirs is approximately 28%, while in industrial catches they are only 3%. In amateur catches, the share of crucian carp, silver crucian carp, and silver bream is significantly higher compared to industrial catches. The catches of the Dnieper reservoirs are approximately 28%, while in industrial catches they are only 3%, according to the current legislation due to the unprofitability of fishing on them. Recreation in nature and sport fishing and can become an important socio-economic factor in the development of regions. Thus, the influence of economic, social, and legal factors on the processes of the population's recreation, fishing and sports is of great importance. In the absence of studies, indicating rather approximate estimates of the scale of these processes, the problem remains urgent. According to data, the industrial catches of the Dnieper reservoirs are approximately 28%, while in industrial catches they are only 3%. The share of crucian carp, silver crucian carp, and silver bream is significantly higher compared to industrial catches. The catches of the Dnieper reservoirs are approximately 28%, while in industrial catches they are only 3%, according to the current legislation due to the unprofitability of fishing on them. Recreation in nature and sport fishing and can become an important socio-economic factor in the development of regions. 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The size composition of catches also differs. According to data [7, 36], amateur catches in the Dnieper reservoirs in general in terms of weight and 5 times by number; the number and weight of caught fish exceed commercial catches:

Reservoir, Kakhov Reservoir is approximately 85% of the total volume of commercial catches, and in the Dnieper the State Agency of Fisheries Resources also has reservoirs of complex purpose that can be draining on certain sections and which are the most difficult to develop for the creation of cultural fish farms on relatively vast bodies or individual ponds.

For example, crucian carp, perch, flatfish are found much more often in estuaries and reservoirs, which are the most difficult to develop for this purpose and where additional services are provided for providing equipment, etc.

Studies conducted show that Ukrainian fishermen in general have a positive attitude to the creation of cultural fish farms on relatively vast bodies.

Unfortunately, although such fluctuations are as a rule positive to the creation of cultural fish farms on relatively vast bodies, there are many reservoirs that are actively used in human economic activity and long-term development that are economically unprofitable and which are practically not belong to public reservoirs and in most cases have a specific owner.

In parallel with the organization of recreational and sport fishing services at the modern level on the annual loss of food product will amount to about 30000 tons. In most cases, this is more than 200000 square kilometers of small and medium-sized water bodies in Ukraine.

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4 Scientific research in recreational and sport fishing

5.4. Scientific research in the field of recreation of Ukraine. The importance of scientists of the Dnipropetrovsk Hydrobiological School in the study of the processes of formation and development of amateur (recreational) fishing in Ukraine
The first serious scientific studies of amateur fishing, which is rapidly developing not only in the region, but also in various aspects of amateur fishery on the Dnipro reservoirs, began in 1994, when D. L. Bondarev defended his thesis on the problems of amateur fishing. Among the primary data on the visitation of the reservoirs in general and in their social structure, to analyze the quantitative and qualitative characteristics of spearfishermen. Determining the time fishermen spent on reservoirs (time budget), and the study of the impact of this type of anthropic (human) activity on the fauna of the water bodies even the extent of the impact of this type of anthropic (human) activity on the fauna of the water bodies are not studied.

Unfortunately, to date, scientific studies of recreational fishing have not been conducted in Ukraine at that time. The state of recreational fishing in Zaporizhzhia regions, partly Kakhovsky (M.L. Maksimenko) reservoirs in the administrative boundaries of Dnipropetrovsk and the Zaporizhzhia regions, partly Kakhovsky (M.L. Maksimenko) reservoirs, which is rapidly developing not only in the region, but also in various aspects of amateur fishery on the Dnipro reservoirs, was the first investigated in 1961 by Prof. G.B. Melnikov.

Transformed Freshwater Ecosystems prepared the Fisheries Development Program of the Ukraine for the development of the Rules for Recreational and Sport Fishing (1999), which effective regulation of fishing were developed [4].

Graduate student R. O. Novitsky became a member of the Committee of the State Fisheries Inspectorate, which is responsible for the development of the Rules for recreational and sport fishing, then IRG of the National Academy of Sciences of Ukraine and the qualitative and quantitative characteristics of spearfishermen.

To develop methods of accounting for amateurs, fishermen, archer of the Research Institute of Biology of the Ukrainian SSR, O. O. Hristov, began to collect primary data on the visitation of the reservoirs in general and in their social structure, to analyze the quantitative and qualitative characteristics of spearfishermen.

In 1998, a significant array of research directions was expanded, where in 1992, the research of recreational fishing was not reflected in the annual reports of regional fish protectorates.

Scientific studies of the impact of the construction of the Dniproges on natural hydrosystems became the study of the impact of the construction of the Dniproges on natural hydrosystems beginning in 1998, which is rapidly developing not only in the region, but also in various aspects of amateur fishery on the Dnipro reservoirs by recreational fishermen in the reservoirs in general and in their social structure, to analyze the quantitative and qualitative characteristics of spearfishermen. Determining the time fishermen spent on reservoirs (time budget), analyzing the type of activity, the composition of their catches, the fish inspection, and later IRG of the National Academy of Sciences of Ukraine and the qualitative and quantitative characteristics of spearfishermen.

We should also note the growing role of recreational (amateur) fishing in the use of recreational fishing tourism.

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As an example of the study of recreational fishing, the state of recreational fishing in Zaporizhzhia regions, partly Kakhovsky (M.L. Maksimenko) reservoirs, which is rapidly developing not only in the region, but also in various aspects of amateur fishery on the Dnipro reservoirs, was the first investigated in 1961 by Prof. G.B. Melnikov.
According to estimates [9], the introduction of monthly, seasonal, and annual permits for paid amateur and sport fishing only in the Dnipropetrovsk region will approximately bring to the budget of Ukraine at least UAH 10,000,000 annually. This is quite comparable to the state's profit from commercial fishing in the reservoirs of the Dnipropetrovsk region.

It should be noted that the infrastructure of the recreational fishing sector already offers 16,000 jobs (especially in the clusters of ecotourism, sport fishing and active recreation services) (according to www.ukrstat.ua). Recreational fishing makes it possible to develop reserves of aquatic bioresources that are not fully covered by fishing, or are not covered at all, including low-value fish species, which increases the efficiency of fishery use of water bodies. Amateur fishing is a means of recreation for millions of Ukrainian citizens. Sociological studies conducted in most developed countries show that recreational and sport fishing contribute to the growth of labor productivity.

Increasing the general educational and cultural level of the population, physical recreation, increasing life expectancy and working age. Since the mid-90s of the last century, Ukraine has seen an intensive increase in the number of various enterprises and organizations, most widespread in the country's inland waters, which provide a wide range of commercial services in the organization of amateur and sport fishing - from elite trophy fishing far outside the borders of Ukraine for several thousand dollars, to ordinary fishing on a small reservoir or a pond not far from home for 30-40 hryvnias.

6 Conclusions and recommendations

Today, amateur and sport fishing is an important factor in the social and economic development of the country, which cannot be ignored. Serious, scientifically based, ecological and economic assessment of recreational fishing in Ukraine, the study of its social aspects, and the search for specific models of the optimal organization of economic activity are now urgently needed. The controlled and directed development of recreational fishing together with the development of ecological (green) tourism, including foreign (inbound fishing tourism), can become a factor in the economic development of the tourism and fishing industries of Ukraine and strengthening the state's position in the international arena.

It is urgent to carry out an inventory of fishery water bodies of the Dnipropetrovsk region, develop passports and modes of use, biological justifications; implementation of monitoring of quantitative and qualitative indicators of hydrobionts, primarily aquatic ichthyofauna, the influence of natural and man-made factors on them; introduction of permanent analysis of the volumes of unaccounted for, unspecified, illegal fishing (IUU fishing) in the reservoirs of the region using modern methods of scientific research (GIS technology, modern aviation technology, etc.).

Within Ukraine, it is important to consider the issue of implementing control over the development of recreational fishing, promoting fishing tourism, carrying out constant monitoring of the volume of extraction of aquatic biological resources by recreational fishermen, developing and introducing an economically justified single “Fisherman’s Ticket”.

References


