



## Technology of Storage of Commercial Fish

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**Abstract:** In this article, out of many environmental factors that are of great importance in the life of fish, information is given on water temperature, gas and salt regimes, by changing these factors, it is possible to prevent fish diseases by changing the external environment and provides information on various storage technologies.

**Keywords:** Amudarya big shovel-nosed, white amur, black amur, cod carp, Aral carp, swordfish, white silver carp and mottled silver carp.

### INTRODUCTION

Local production of the necessary equipment, devices and mechanisms for intensive cultivation, fishing and processing of fish is not established. As a result, many businessmen spend too much time and money and buy them abroad.

Foreign direct investment in the fishing industry is not properly organized; therefore, effective and mutually beneficial cooperation with foreign countries and organizations has not been established.

From January 15, 2022, in accordance with the State Program "Every Family is an Entrepreneur", the loan amount for fish farms will be increased from 150 to 300 times the base estimated amount.

This is provided for by the Presidential Decree "On Additional Measures for the Further Development of the Fishing Industry", adopted on January 13.

The document provides for the introduction of the experience of the fishing cluster created in the Jizzakh region, based on cooperation with national farms in all regions of our country.

It was decided that fish farms should organize training for owners of household plots in fish farming, provide them with the necessary equipment, nets, feed, mineral fertilizers, and buy the fish they grow at contractual prices.

Intensively grown on their territory, the owners of the farms sell the fish to the farms at negotiated prices. From February 1, 2022, they will be able to register as individual entrepreneurs.

**The relevance of the work.** There are more than 20 reservoirs on the territory of our republic, and the introduction of fishing and hunting on a farm basis in these waters are additional opportunities for the development of fisheries. In the reservoirs used, the old-extensive method of growing small fish products is used.

**Purpose and task of the work.** The current requirement is the further expansion of pond fishing and the acceleration of the production of fish products, as well as the use of new technologies.

According to the information given in [1], it is emphasized that carp fish grow very well in

the conditions of our republic and good products can be obtained from them. In natural reservoirs of our republic, carp reaches 30-35 cm in length and 2 kg of weight at the age of 2-3 years. According to the author, in the conditions of Uzbekistan, the cultivation of carp together with grass carp and silver carp on the basis of polyculture gives good results.

A number of scientists conducted scientific work and observations on reservoirs in different zones of Uzbekistan. Among them, M.R. Ergashev (1975) carried out scientific research on the biology and economic importance of fish in the Tagchamar reservoir, which are mainly of hunting importance.

[2] Scientific studies of commercial fish of the Kuymozor and Tudakul reservoirs have been carried out.

As a result of the opening of the Amu-Bukhara Canal, 9 species of fish were transferred from the Amu Darya to the Kuymozor and Tudakul reservoirs, such as: the Amudarya big shovel-nosed, white amur, black amur, cod carp, Aral carp, swordfish, white silver carp and mottled silver carp.

[3] mainly conducted scientific research on acclimatized fish. They studied the morpho-ecological features of acclimatized fish of the eastern bystrianka, grass carp, silver carp and silver carp living in the Kuimozor and Tudakul reservoirs. [3] conducted scientific research on the morphological features of fish in salt water bodies and the development of fisheries in these lakes.

For fish, water (with pond soil, bacteria, algae, invertebrates) is the external environment and affects all life processes in the fish body (respiration, nutrition, blood production and circulation, nervous activity, growth). That is why it is important to keep the zoohygienic conditions in the pond at an optimal level to keep the fish alive.

Among the numerous environmental factors that are of great importance in the life of fish, the most important are water temperature, gas and salt regimes, by changing these factors, it is possible to prevent fish diseases by changing the external environment.

Effect of water temperature on fish. Water temperature not only affects the growth and development of fish, but also affects the occurrence and course of diseases, that is, the lowest temperature (from 0.1-0.2 °C) and the highest (above 30 °C) have a negative effect on carp fish, it can change in one direction or another in other fish species.

The water temperature should be at a certain level during the periods of development of various fish species (eggs, larvae, fry and others).

Low water temperature has a negative effect on fish, causing narrowing of peripheral vessels, slowing down of breathing, loss of body weight, as a result of metabolic disorders, glycolysis and late development of the autolysis process, as well as gradual death of fish.

Changes in water temperature not only affect the fish, but also increase the development of various parasites and cause diseases.

For example, viral hemorrhagic septicemia occurs in a mild form when the water temperature drops to 10-12°C, and aeromonosis, runway and bronchomycosis are more severe when the water temperature is above 20-25°C.

On cold winter days, many carp can die due to scale colds (Staff's disease) and injuries to the gills.

In addition, the cooling or warming of water causes a decrease in the natural nutrients necessary for fish, an increase in toxic substances in the water and, in general, a change in the species of fauna and flora necessary for fish.

Influence of the gas regime of the reservoir on fish. Water takes nitrogen, oxygen and carbon dioxide from the atmosphere and creates the zoohygienic environment necessary for the life of fish, and an increase or decrease in the amount of gas in the water adversely affects the life of fish.

The presence of hydrogen sulfide and gaseous methane indicates that the reservoir is in an unsanitary state, in such waters various diseases are becoming more frequent, causing the death of many fish.

The study of water quality in the pool. Like all living things, fish live in an environment that allows them to grow and develop, and their productivity is directly dependent on this environment. Therefore, the study of the quality of water in ponds, the habitat of fish, is of great practical importance. The study of the chemical composition of the water of lakes, ponds, reservoirs, streams, rivers, artesian wells allows you to determine whether it is suitable for breeding fish or not.

According to the total amount of dissolved substances in the composition of water, they are conditionally divided into three groups: fresh, brackish and salty. In 1 liter of fresh water contains up to 1 g, in brackish - from 1 to 15 g, in salty - from 15 to 40 g of dissolved minerals.

**Conclusion.** The ratio of the area of ponds depends on the area of the ponds, the productivity of the pond, the productivity of the pond, the temporary rearing and conservation of fish, the farming system.

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