tors of fourth generation CT systems are fixed in space. This variant of detectors provides better signal registration.

Characteristics of detecting systems in CT may be improved by development of computer technology, new signal detection systems and other advances.

Zagortseva E., Asipchyk M., Golubev A.

International Sakharov Environmental Institute of Belarusian State University, Minsk, Republic of Belarus

GROWTH ASTACUS ASTACUS IN EXPERIMENTAL CONDITIONS AT DIFFERENT PLANTING DENSITIES

The aquaculture of crawfishes within long years developed in the countries with tropical and subtropical climate, but in midlatitudes industrial cultivation of hydrobionts takes quite modest place. Value of an aquaculture for Belarus which doesn't have an entry in the World Ocean, but possessing a significant amount of internal reservoirs is especially big. In our country their cultivation at the moment wasn't beyond researches.

The success of rearing juvenile crawfish in aquaculture is determined by many factors: quality of the water environment (temperature, pH, oxygen mode, purity of water, photoperiod, etc.), quality of a forage and diet, control of diseases, sizes and age of individuals and density of their landing.

For studying of growth of wide-brimmed cancer (Astacus astacus) at the different density of landing in vitro the juveniles of cancer were divided into control groups.

Further crayfish for convenience of carrying out experiment on dwelling in case of group landing were divided and placed in 3 aquariums, everyone in amount of 7 l. In an aquarium No. 1 5 individuals, in an aquarium No. 2 – 10 individuals, in an aquarium No. 3 – 19 individuals were replaced. Other larvae, in number of 10, put in separate glass reservoirs in amount 1 l for studying of density of landing in case of single dwelling.

At the age of 3 months the average mass of all 10 individuals in case of single landing constituted 283,1 mg, in 6 months – 452,5 mg, in 7 months – 488,5 mg, in 8 months – 625,9 mg. Further results for individuals in 3 aquariums in case of group landing are shown. At the age of 3 months average weight constituted 289,9 mg, in 6 months – 450,1 mg, in 7 months – 563,1 mg, in 8 months – 759,5 mg.

Researches showed that the number of the individuals who are in one reservoir influences death rate of crayfish. The more individuals is in one reservoir, the death rate is higher. From 10 individuals who lived one by one only 1 cancer died.

At the increased landing density final weight indicators were higher, than in case of lower. At the low density high survival and increase in weight, rather independent of density, are noted. In the conditions of the increased landing density

growth of individuals leads to gradual exhaustion of resources of living floor space for them that is a powerful limiting factor.

The obtained data can be used for further studying of features of growth of wide-brimmed cancer at the different density of landing in vitro.

Zaranko M., Golovatyi S.

International Sakharov Environmental Institute of Belarusian State University, Minsk, Republic of Belarus

METHODOLOGICAL APPROACHES OF CALCULATION OF ECOSYSTEM SERVICES

It is necessary to understand all range of goods and the services provided by the nature as ecosystem services. On the existing classification the services provided by ecosystems can belong to one of four broad categories which in essential degree match functions of the natural equity. They include the providing, regulating and cultural services which directly influence people, and also the support services necessary for preserving other services.

Now in the world development of a wide range of the questions connected with ecosystem services including their assessment, determination of potential sellers and buyers and mechanisms of compensation, forming of the markets of these services actively begins. Ecosystem services include the resource, regulating, cultural and other services and are determined as benefits which people receive from ecosystems. The kyoto protocol, to some extent, became the first attempt of the world community on a global scale to include ecosystem services (including payments and compensation to the certain countries) in the international and national economic mechanisms for fight against climate change.

It is necessary to begin development of ecoservices with identification, further accounting and assessment – on the basis of the analysis of extent of degradation and a possibility of recovery of ecosystems. The list will include the processes of agriculture, livestock production, fish breeding, collection of officinal herbs and seaweed supporting and regulating the cultures, etc. occurring in the territory of Belarus.

In case of assessment of ecosystem services study their role, a complex of technological and economic measures for accounting of some types. Only in case of complete understanding of a question it will be possible to adjust accounting, statistics, planning. It isn't excluded that entering of certain quotas, an incentivization will be required, changes in the taxation – are possible provided that ecosystem services will be entered into the field of state regulation and the legislation of Belarus. It is necessary to understand that development of ecosystem services adjoins to economy and shall be considered in the economic block of the National Sustainability Strategy (NSS).