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SHCHERBININ Y.I., студент

Scientific supervisor **KARTUNOVA A.I.**, senior lecturer

EE «Vitebsk State Academy of Veterinary Medicine», Vitebsk, the Republic of Belarus

FLORA AND FAUNA OF CHERNOBYL 30 YEARS AFTER THE ACCIDENT

Over 30 years have passed since the accident at Chernobyl – one of the largest technological disasters of the 20th century. On the territory of the three most affected districts of Bragin, Khoyniki and Narovlya in September 1988 Polesky Radiation-ecological Reserve was established. This reserve is the largest one among the ecological reserves and national parks of Belarus and it covers 216 093 hectares. The territory of the reserve is characterized by the highest level of radioactive contamination. About 30% of the cesium-137, more than 70% of strontium-90 and about 97% of the transuranic elements deposited on the territory of Belarus concentrated in this locality. Polesky Radiation-ecological Reserve was established to implement a number of measures in order to prevent the spread of radionuclides outside the exclusion zone, to carry out radiobiological research, to study the status of flora and fauna, to run radiation-ecological monitoring.

Along with its multiple tasks scientific staff investigates the dynamics of the situation in the natural complexes in the zone, studies accumulation of radioactive substances by flora and fauna objects, evaluates the status of nature in terms of pollution.

As data show flora encounters about 1251 species of plants, which makes about two-thirds of the total plant species diversity in the Republic of Belarus. Tree plantings cover more than 50% of the land.

More than one hundred species of nestling birds are registered on the territory of the reserve, which makes 2/5 of the avifauna of Belarus. The species of birds recorded in the Red Book of Belarus account for 11.7%.

Protected lands became a home for more than 40 species of terrestrial mammals, accounting for 57.9% of the mammal species diversity in Belarus. A large part of wildlife in those places are either rare specimens, or endangered species. The bear, badge, lynx, bison keep growing in number, and such animals as elk, wild boar, red deer, roe deer, wolf are flourishing in this unique place.

The reserve territories and adjacent areas are completely free from the transport, industrial, agricultural loads, and actually there is no human impact on the natural environment here. That is why the positive dynamics of recovery of fauna and flora and positive changes of phyto and zoocenoses in this area have been noticed. However, scientists admit that there are highly contaminated localities with deadly damaged biogeocenoses and biodiversity, this occurs when radioactive contamination is the highest.