

tions due to the radioactive contamination. However, no consistent differences in reproductive ability were detected between the impacted and reference populations as measured by the frequency of abortive seeds. Even though the Scots pine populations have occupied radioactively contaminated territories for two decades, there were no clear indications of adaptation to the radiation, when measured by the number of aberrant cells in root meristems of seeds exposed to an additional acute dose of radiation.

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SOLVING ENVIRONMENTAL PROBLEMS DURING THE WASTE PRODUCTION ACCORDING TO THE STATE WASTE CADASTRE OF THE REPUBLIC OF BELARUS

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In this work the analysis of maintaining and processing of data of the state inventory of waste which is conducted according to the state statistical reporting 1-waste (Minprirody) is carried out. The analysis revealed that it is necessary to develop and implement a system that allows to collect statistical data in the "online" mode, which will solve many problems associated with the collection, processing time, increasing the accuracy and speed of data acquisition.

Keywords: state waste cadastre, state statistical reporting form 1-waste (Minprirody), waste production.

The state waste cadastre is a systematic set of data, including quantitative and qualitative characteristics of waste, information on their use, storage, disposal and disposal. Maintenance of the inventory is carried out in accordance with the resolution of the Council of Ministers of the Republic of Belarus dated 19.06.2010 № 934 "On approval of the Regulations on the procedure of the state waste cadastre" [3].

The initial information for the formation of the inventory are:

- data of the state statistical reporting of legal entities on form 1-waste (Minprirody);
- data of reports of the Ministry of housing and communal services on the implementation of the state plan for the procurement of secondary material resources;
- data of reports of the Ministry of housing and communal services on the amount of solid waste buried in landfills;
- data registers objects for use, deactivation, storage, burial of wastes [1, 4].

The waste inventory consists of the following sections: production waste, municipal solid waste, secondary raw materials, object registers.

The collection of some types of waste information, which was subsequently included in the inventory, began as early as 1993. The registry was created in 2010, and from that moment on, it is a gradual development and improvement. At the moment, the inventory contains information about 12 thousand enterprises (10 thousand – under the section "production waste", another 2000 – under the section "object registers").

The data recorded in the cadastre are regularly used in the work with interested persons – for example, at the request of the Ministry of natural resources and environmental protection, its territorial bodies and other interested persons, various information samples are submitted. The inventory is updated annually.

However, there are a number of shortcomings that have a negative impact on the efficiency of the inventory. The article considers the section of the inventory "production waste", which is formed on the basis of summary data of the state statistical reporting 1-waste (Minprirody) "Report on waste management".

The disadvantages of the section include:

1. Late submission of reports. Legally established deadline form 1-waste (Minprirody) in RUE "Bel RDC "Ecology" – 20 Jan. However, some legal entities, for various reasons, send reports later than this date [2].

2. Frequent violation of filling instructions. Despite the clear requirements for filling out the form 1-waste (Minprirody), many enterprises make mistakes when filling out the report, which are often not possible to correct quickly. In this regard, errors have to be corrected directly by employees of RUE " Bel RDC " Ecology " during the processing of information.

3. No possibility to collect reports in "online" mode. Every year at RUE "Bel RDC "Ecology" reports more than 10 000 enterprises. Form 1-waste (Minprirody) contains an average of 12 records (sometimes up to 40 records). The volume of information is so large that the collection, synthesis of administrative-territorial division, input, correction of mistakes by organizations is carried out with the participation of 10 employees manually for 4–5 months.

The development and implementation of a system that allows to collect statistical data in the "online" mode, would solve these problems, significantly reduce both time costs and the number of employees involved in the processing of information.

In order to improve data collection, reduce data processing time, increase the accuracy and speed of data received on form 1-waste (Minprirody), we are developing a proposal to improve the provision of form 1-waste in electronic form on the website on the Internet – interactive form 1-waste (Minprirody). Legal entities will independently enter data into the online form. To do this, they need to: register or log in to your account, read the rules of filling out the form, fill in the data personal account, waste form, activities and send the form. After filling in the form, and before it is sent, the legal entity can make changes or delete the data entered in the form. Before submitting the form, the application server must verify that all the columns of the form are filled with information.

If the information is not filled in or not completely filled in, it should not be possible to submit the form.

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MONITORING OF FLOODPLAIN VEGETATION OF THE RIWER WESTERN DVINA

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The article analyzes the structure and species composition of floodplain meadows of the Western Dvina, since this type of plant communities has a large economic significance as pasture and hayfields.

Keywords: floodplain meadows, species composition, cereals, composite plants, motley grass.

The importance of floodplain meadows lies in the fact that they are an important source of cheap and biologically complete feed. A distinctive feature of this type of meadow based on early period they are flooded with flood waters, after the decline of which there is silt enriching the soil with nutrients that create favorable conditions for the growth of meadow vegetation, often possessing medicinal properties or including species that are listed in the Red Book.

To conduct research in 2018 at two selected sites, a monitoring of the species composition of vegetation, an analysis of the productivity of the floodplain phytocenosis, and the indicator of the net production of photosynthesis was calculated.

As a result of the study, it became known that 30 species of higher vascular plants were registered in the two study areas, which belong to 13 families. The most numerous in number of species were representatives of the family Cereals (Poaceae), which amounted to 24.5% of the phytocenosis of the meadow. Figure 1 shows the percentage of the main families of the floodplain phytocenosis in 2018.