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Центр коллективного пользования «Инструментальные методы в экологии»

Перечень публикаций, подготовленных по результатам работ, выполненных с использованием научного оборудования ЦКП за 2020 год

№ п/п	Вид публикации	Наименование публикации	DOI публикации	Автор(ы)	Издание, номер, год	ISSN / ISBN издания	Индексация издания	Краткое описание научных результатов, полученных на оборудовании ЦКП	Наличие в публикации ссылки на ЦКП	Страница, содержащая ссылку на ЦКП
1	2	3	4	5	6	7	8	9	10	11
1.	Статья в научном журнале	A New Glance at Old Samples: Remains of Freshwater Invertebrates Associated with Mummified Carcasses of Large Quaternary Mammals	10.1134/S1062359020070080	Kotov A.A. , Neretina A.N., Zharov A.A., Izymova E.I. , et. al.	Biology Bulletin, 47 (7), 2020	1062-3590	ВАК; Ринц; Web of Science; Scopus	Carcasses of mammals with well-preserved soft tissues from the permafrost of Siberia and northern North America are among the most important sources of our knowledge on Quaternary environments. However, the potential of this information source is far from being exhausted. The objective of this study is to reveal and describe the remains of freshwater invertebrates in the hair and gut contents of large Pleistocene mammals stored for a long time in museum collections. We have studied the gut contents of two mammoths, as well as the hair of two other mammoths, one woolly rhinoceros, four bison, and two horses. Remains of invertebrates were found in the gut contents of both mammoths, as well as in the hair of two mammoths and the woolly rhinoceros, while no remains were detected in the bison and horse hair. Among the remains of microscopic invertebrates, the most common are branchiopod crustaceans, namely the ephippia of <i>Daphnia</i> sp., <i>Simocephalus</i> sp., the head shields and valves of Chydoridae (Cladocera), and the mandibles of tadpole shrimps (Notostraca). Based on our current level of knowledge, we are able to identify only a limited number of Pleistocene branchiopods. Studies on Recent taxa with the aim to develop identification keys to the aforementioned groups are needed, as they could significantly expand the potential of palaeoecological analysis.	Да (если в тексте публикации указано название ЦКП или УНУ)	759

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2.	Статья в научном журнале	Altered energy partitioning across terrestrial ecosystems in the European drought year 2018	https://doi.org/10.1098/rstb.2019.0524	Graf A, Klosterhalfen A, Arriga N, Bernhofer C, et al.	Philosophical Transactions of the Royal Society B: Biological Sciences., 375 (1810), 2020	0962-8436	ВАК; Ринц; Web of Science; Scopus	Drought and heat events, such as the 2018 European drought, interact with the exchange of energy between the land surface and the atmosphere, potentially affecting albedo, sensible and latent heat fluxes, as well as CO ₂ exchange. Each of these quantities may aggravate or mitigate the drought, heat, their side effects on productivity, water scarcity and global warming. We used measurements of 56 eddy covariance sites across Europe to examine the response of fluxes to extreme drought prevailing most of the year 2018 and how the response differed across various ecosystem types (forests, grasslands, croplands and peatlands). Each component of the surface radiation and energy balance observed in 2018 was compared to available data per site during a reference period 2004-2017. Based on anomalies in precipitation and reference evapotranspiration, we classified 46 sites as drought affected. These received on average 9% more solar radiation and released 32% more sensible heat to the atmosphere compared to the mean of the reference period. In general, drought decreased net CO ₂ uptake by 17.8%, but did not significantly change net evapotranspiration. The response of these fluxes differed characteristically between ecosystems; in particular, the general increase in the evaporative index was strongest in peatlands and weakest in croplands. This article is part of the theme issue 'Impacts of the 2018 severe drought and heatwave in Europe: from site to continental scale'.	Нет	0
3.	Статья в научном журнале	Assimilation of aboveground litter carbon versus soil carbon by Collembola and Lumbricidae in spruce forest: a litter replacement experiment	10.3161/15052249PJE2020.68.2.006	Semenina E.E., Tiunov A.V.	POLISH JOURNAL OF ECOLOGY, 68, 2020	1505-2249	ВАК; Ринц; Web of Science; Scopus	In a small-scale field experiment, we estimated the contribution of aboveground litter to the energy budget of different collembolan and earthworm species. In a 50-year-old spruce plantation, the natural spruce litter was replaced by an equivalent amount of maize litter. The natural difference in the isotopic composition of carbon (C) between the spruce and maize allowed us to estimate the proportions of different carbon sources in the tissues of soil animals. The dependence on litter-derived C was least pronounced in Collembola having low δ ¹⁵ N values, indicating the feeding on non-vascular plants. In contrast, collembolans having high δ ¹⁵ N values belonged to the food chains based on fresh plant residuals. These results suggest that different species of litter-dwelling collembolans may regulate substantially different energy channels. Some species of endogeic earthworms (<i>Aporrectodea rosea</i> and <i>A. caliginosa</i>) utilize aboveground plant residues, though soil organic matter and other belowground sources of carbon prevail in the energy budget of their populations.	Да (если в тексте публикации указано название ЦКП или УНУ)	178

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4.	Статья в научном журнале	Assurance of the existence of a trans-boundary population of the snow leopard (<i>Panthera uncia</i>) at Tsagaanshuvuut - Tsagan- Shibetu SPA at the Mongolia-Russia border	10.1111/1749-4877.12420	Poyarkov A.D., Munkhtsog B., Korablev M., Kuksin A.N., Alexandrov D.Y., et al.	Integrative Zoology, 15, 2020	1749-4877	БАК; Ринц; Web of Science; Scopus	The existence of a trans-boundary population of the snow leopard (<i>Panthera uncia</i>) that inhabits the massifs of Tsagaanshuvuut (Mongolia) - Tsagan-Shibetu (Russia) was determined through non-invasive genetic analysis of scat samples and by studying the structure of territory use by a collared female individual. The genetic analysis included species identification of samples through sequencing of a fragment of the cytochrome b gene and individual identification using a panel of 8 microsatellites. The home range of a female snow leopard marked with a satellite Global Positioning System (GPS) collar was represented by the minimum convex polygon method (MCP) 100, the MCP 95 method and the fixed kernel 95 method. The results revealed insignificant genetic differentiation between snow leopards that inhabit both massifs (minimal fixation index [FST]), and the data testify to the unity of the cross-border group. Moreover, 5 common individuals were identified from Mongolian and Russian territories. This finding clearly shows that their home range includes territories of both countries. In addition, regular movement of a collared snow leopard in Mongolia and Russia confirmed the existence of a cross-border snow leopard group. These data support that trans-boundary conservation is important for snow leopards in both countries. We conclude that it is crucial for Russia to study the northern range of snow leopards in Asia.	Да (если в тексте публикации указано название ЦКП или УНУ)	226

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5.	Статья в научном журнале	Carbon-nitrogen interactions in European forests and semi-natural vegetation; Part 1: Fluxes and budgets of carbon, nitrogen and greenhouse gases from ecosystem monitoring and modelling	https://doi.org/10.5194/bg-17-1583-2020	Flecharde CR, Ibrom A, Skiba UM, de Vries W, et al.	Biogeosciences, 17 (6), 2020	1726-4170	BAK; Ринц; Web of Science; Scopus	The impact of atmospheric reactive nitrogen (Nr) deposition on carbon (C) sequestration in soils and biomass of unfertilized, natural, semi-natural and forest ecosystems has been much debated. Many previous results of this dC/dN response were based on changes in carbon stocks from periodical soil and ecosystem inventories, associated with estimates of Nr deposition obtained from large-scale chemical transport models. This study and a companion paper (Flecharde et al., 2020) strive to reduce uncertainties of N effects on C sequestration by linking multi-annual gross and net ecosystem productivity estimates from 40 eddy covariance flux towers across Europe to local measurement-based estimates of dry and wet Nr deposition from a dedicated collocated monitoring network. To identify possible ecological drivers and processes affecting the interplay between C and Nr inputs and losses, these data were also combined with in situ flux measurements of NO, N2O and CH4 fluxes; soil NO3 leaching sampling; and results of soil incubation experiments for N and greenhouse gas (GHG) emissions, as well as surveys of available data from online databases and from the literature, together with forest ecosystem (BASFOR) modelling. Multi-year averages of net ecosystem productivity (NEP) in forests ranged from -70 to 826 g C m-2 yr-1 at total wet + dry inorganic Nr deposition rates (Ndep) of 0.3 to 4.3 g N m-2 yr-1 and from -4 to 361 g C m-2 yr-1 at Ndep rates of 0.1 to 3.1 g N m-2 yr-1 in short semi-natural vegetation (moorlands, wetlands and unfertilized extensively managed grasslands). The GHG budgets of the forests were strongly dominated by CO2 exchange, while CH4 and N2O exchange comprised a larger proportion of the GHG balance in short semi-natural vegetation. Uncertainties in elemental budgets were much larger for nitrogen than carbon, especially at sites with elevated Ndep where Nr leaching losses were also very large, and compounded by the lack of reliable data on organic nitrogen and N2 losses by denitrification. Nitrogen losses in the form of NO, N2O and especially NO3 were on average 27 % (range 6 %-54 %) of Ndep at sites with Ndep < 1 g N m-2 yr-1 versus 65 % (range 35 %-85 %) for Ndep > 3 g N m-2 yr-1. Such large levels of Nr loss likely indicate that different stages of N saturation occurred at a number of sites. The joint analysis of the C and N budgets provided further hints that N saturation could be detected in altered patterns of forest growth. Net ecosystem productivity increased with Nr deposition up to 2-2.5 g N m-2 yr-1, with large scatter associated with a wide range in carbon sequestration efficiency (CSE, defined as the NEP / GPP ratio). At elevated Ndep levels (> 2.5 g N m-2 yr-1), where inorganic Nr losses were also increasingly large, NEP levelled off and then decreased. The apparent increase in NEP at low to intermediate Ndep levels was partly the result of geographical cross-correlations between Ndep and climate, indicating that the actual mean dC/dN response at individual sites was significantly lower than would be suggested by a simple, straightforward regression of NEP vs. Ndep.	Нет	0
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6.	Статья в научном журнале	Carbon-nitrogen interactions in European forests and semi-natural vegetation; Part 2: Untangling climatic, edaphic, management and nitrogen deposition effects on carbon sequestration potentials	https://doi.org/10.5194/bg-17-1621-2020	Flechard CR, van Oijen M, Cameron DR, de Vries W, et al.	Biogeosciences, 17 (6), 2020	1726-4170	БАК; Ринц; Web of Science; Scopus	The effects of atmospheric nitrogen deposition (Ndep) on carbon (C) sequestration in forests have often been assessed by relating differences in productivity to spatial variations of Ndep across a large geographic domain. These correlations generally suffer from covariation of other confounding variables related to climate and other growth-limiting factors, as well as large uncertainties in total (dry + wet) reactive nitrogen (Nr) deposition. We propose a methodology for untangling the effects of Ndep from those of meteorological variables, soil water retention capacity and stand age, using a mechanistic forest growth model in combination with eddy covariance CO2 exchange fluxes from a Europe-wide network of 22 forest flux towers. Total Nr deposition rates were estimated from local measurements as far as possible. The forest data were compared with data from natural or semi-natural, non-woody vegetation sites. The response of forest net ecosystem productivity to nitrogen deposition (dNEP / dNdep) was estimated after accounting for the effects on gross primary productivity (GPP) of the co-correlates by means of a meta-modelling standardization procedure, which resulted in a reduction by a factor of about 2 of the uncorrected, apparent dGPP / dNdep value. This model-enhanced analysis of the C and Ndep flux observations at the scale of the European network suggests a mean overall dNEP / dNdep response of forest lifetime C sequestration to Ndep of the order of 40-50 g C per g N, which is slightly larger but not significantly different from the range of estimates published in the most recent reviews. Importantly, patterns of gross primary and net ecosystem productivity versus Ndep were non-linear, with no further growth responses at high Ndep levels (Ndep > 2.5-3 g N m ⁻² yr ⁻¹) but accompanied by increasingly large ecosystem N losses by leaching and gaseous emissions. The reduced increase in productivity per unit N deposited at high Ndep levels implies that the forecast increased Nr emissions and increased Ndep levels in large areas of Asia may not positively impact the continent's forest CO2 sink. The large level of unexplained variability in observed carbon sequestration efficiency (CSE) across sites further adds to the uncertainty in the dC/dN response.	Нет	0

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7.	Статья в научном журнале	Crustacean remains from the Yuka mammoth raise questions about non-analogue freshwater communities in the Beringian region during the Pleistocene	https://doi.org/10.1038/s41598-020-57604-8	Neretina A.N., Gololobova M.A., Neplyukhina A.A., Zharov A.A., et al.	Scientific Reports, 10:859, 2020	2045-2322	ВАК; Ринц; Web of Science; Scopus	Frozen permafrost Pleistocene mammal carcasses with soft tissue remains are subject to intensive study and help elucidate the palaeoenvironment where these animals lived. Here we present an inventory of the freshwater fauna and flora found in a sediment sample from the mummified Woolly Mammoth carcass found in August 2010, from the Oyogos Yar coast near the Kondratievo River in the Laptev Sea region, Sakha (Yakutia) Republic, NE Russia. Our study demonstrates that the waterbody where the carcass was buried could be characterized as a shallow pond or lake inhabited mainly by taxa which are present in this area today, but additionally by some branchiopod crustacean taxa currently absent or unusual in the region although they exist in the arid zone of Eurasia (steppes and semideserts). These findings suggest that some "non-analogue" crustacean communities co-existed with the "Mammoth fauna". Our findings raise questions about the nature of the waterbodies that existed in Beringia during the MIS3 climatic optimum when the mammoth was alive.	Да (если в тексте публикации указано название ЦКП или УНУ)	9
8.	Статья в научном журнале	Description of a new species in the genus <i>Bythotrephes</i> Leydig, 1860 (Crustacea: Cladocera: Onychopoda), supplements to selected species, and concluding remarks on the genus	https://doi.org/10.11646/zootaxa.4789.2.5	Korovchinsky N.M.	Zootaxa, 4789 (2), 2020	1175-5326	ВАК; Ринц; Web of Science; Scopus	A new species of the genus <i>Bythotrephes</i> is described based on material collected in the mountain lakes of Tyva Republic (Southern Siberia, Russia). The representatives of the new species are especially close to those of <i>B. longimanus</i> having long tl I, straight caudal process, and only two pairs of claws on postabdomen and caudal process, respectively. At the same time, the new species is, on average, smaller with shorter caudal process and fairly long apical setae of second endopodital segment of the thoracic limbs of first pair (tl I). Supplemental data on morphology, taxonomy, and geographic distribution of other species of the genus, e.g., <i>B. arcticus</i> , <i>B. cederströmii</i> , <i>B. brevimanus</i> , and <i>B. lilljeborgi</i> , are presented. For <i>B. cederströmii</i> , in particular, females of first generation hatched from resting eggs are described for the first time. Classification of the genus is discussed and an updated key for species and a hybrid form is presented. The highest species richness of the genus, observed within the Scandinavian Peninsula and in the north of European Russia, may indicate the central region of primary speciation which generally coincides with the region of the last Quaternary maximum glaciation. The isolated occurrence of three species, <i>B. longimanus</i> , <i>B. transcaasicus</i> , and <i>B. centralasiaticus</i> sp. nov. on the southern border of the genus' range, in pre-Alpine and mountain lakes of Europe, Transcaucasia, and Southern Siberia (Tyva) and isolated localities of <i>B. arcticus</i> in Northern Kazakhstan, could also be due to the effect of glaciation(s). Regarding the origin of the genus <i>Bythotrephes</i> , it is hypothesized that it occurred in pre-Pleistocene time in the ancient Ponto-Caspian basin, experiencing large-scale transgressions, where the intensive radiation of ancestral Onychopoda probably took place.	Да (если в тексте публикации указано название ЦКП или УНУ)	460

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9.	Статья в научном журнале	Ecological and Morphological Characteristics of the Stomachs of Wild Goats		Khatsaeva R.M.	International Journal of Advanced Science and Technology, 29, 2020	2005-4238	не индексируется	The research aims at identifying the morphofunctional characteristics of the stomach chambers and the specificity of endosymbiosis in connection with the food specialization of the bezoar goat (<i>Capra aegagrus Erxleben, 1777</i>) and the Dagestan tur (<i>Capra caucasica cylindricornis Blyth, 1841</i>). The choice of objects is due to their belonging to the same genus (<i>Capra Linnaeus, 1758</i>), living on the same territory and having a different food specialization within the zone of their sympatry.	Да (если в тексте публикации указано название ЦКП или УНУ)	2408
10.	Статья в научном журнале	Ecosystem transpiration and evaporation: Insights from three water flux partitioning methods across FLUXNET sites	https://doi.org/10.1111/gcb.15314	Nelson J.A., Pérez-Priego O., Zhou S., Poyatos R., et al.	Global Change Biology, 26, 2020	1354-1013	БАК; Ринц; Web of Science; Scopus	We apply and compare three widely applicable methods for estimating ecosystem transpiration (T) from eddy covariance (EC) data across 251 FLUXNET sites globally. All three methods are based on the coupled water and carbon relationship, but they differ in assumptions and parameterizations. Intercomparison of the three daily T estimates shows high correlation among methods (R between .89 and .94), but a spread in magnitudes of T/ET (evapotranspiration) from 45% to 77%. When compared at six sites with concurrent EC and sap flow measurements, all three EC-based T estimates show higher correlation to sap flow-based T than EC-based ET. The partitioning methods show expected tendencies of T/ET increasing with dryness (vapor pressure deficit and days since rain) and with leaf area index (LAI). Analysis of 140 sites with high-quality estimates for at least two continuous years shows that T/ET variability was 1.6 times higher across sites than across years. Spatial variability of T/ET was primarily driven by vegetation and soil characteristics (e.g., crop or grass designation, minimum annual LAI, soil coarse fragment volume) rather than climatic variables such as mean/standard deviation of temperature or precipitation. Overall, T and T/ET patterns are plausible and qualitatively consistent among the different water flux partitioning methods implying a significant advance made for estimating and understanding T globally, while the magnitudes remain uncertain. Our results represent the first extensive EC data-based estimates of ecosystem T permitting a data-driven perspective on the role of plants' water use for global water and carbon cycling in a changing climate.	Да (если в тексте публикации указано название ЦКП или УНУ)	0

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11.	Статья в научном журнале	Ecotype and geographical variation in carbon and nitrogen stable isotope values in western North Pacific killer whales (<i>Orcinus orca</i>)	10.1111/mm.s.12688	Borisova E.A., Filatova O.A., Fedutin I.D., Tiunov A.V., Shpak O.V., Hoyt E.	MARINE MAMMAL SCIENCE, 36, 2020	0824-0469	BAK; Ринц; Web of Science; Scopus	Killer whales are top predators in marine trophic chains, and therefore their feeding preferences can substantially affect the abundance of species on the lower trophic levels. Killer whales are known to feed on many different types of prey from small fish to large whales, but a given killer whale population usually focuses on a specific type of prey. Stable isotope analysis is widely used to study whale diets, because direct observations are often impossible. Killer whale feeding habits in the western North Pacific are poorly studied, and the large-scale stable isotope analysis provides a unique opportunity to gain insights into the trophic links of this top predator. In this study, we compare the $\delta^{13}C$ and $\delta^{15}N$ stable isotope values from killer whale skin samples obtained in different areas of the western North Pacific from fish-eating (R-type) and mammal-eating (T-type) killer whale ecotypes. The effect of ecotype was highly significant: both carbon and nitrogen stable isotope values were lower in R-type whales than in T-type whales. The geographical variation also affected killer whale stable isotope values due to both the differences in killer whale diet and the variation in baseline stable isotope values across the study areas.	Да (если в тексте публикации указано название ЦКП или УНУ)	929
12.	Статья в научном журнале	Effect of organic biological additives on the morphology of the digestive tract in quails	10.1088/1755-1315/421/5/052019	Khatsaeva R.M.	IOP Conf. Series: Earth and Environmental Science, 421, 2020	1755-1315	Scopus	Using morphology and light microscopy, this work shows the positive effect of application of hydroponically grown wheat and an aqueous solution of astragalus as biological food additives on the development of the digestive system: muscular and glandular stomachs in Texas Pharaoh quails (<i>Coturnix</i>). Quails were divided into two groups (control and experimental) of 60 heads each. During the study, both groups were subject to identical keeping and feeding conditions in accordance with the established standards. Hydroponically grown wheat and an aqueous solution of astragalus were added to the diet of the experimental quail group. The data analysis conducted for the control and experimental quail groups using histology, morphometry and light microscopy made it possible to identify common patterns of the organization and development of morphofunctional structures of muscular and glandular stomachs and special aspects expressed in their more intensive development in the experimental group. The research data show that the use of hydroponically grown wheat and a solution of astragalus as organic bioadditives for stimulating the growth and development of production traits in quails and other birds is safe and acceptable. The obtained research data are of both practical and theoretical importance in implementing food programs and ensuring their reliability.	Да (если в тексте публикации указано название ЦКП или УНУ)	2

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1	2	3	4	5	6	7	8	9	10	11
13.	Статья в научном журнале	First Description of the Fur of Two Cubs of Fossil Cave Lion <i>Panthera spelaea</i> (Goldfuss, 1810) Found in Yakutia in 2017 and 2018	10.1134/S0012496620030011	Chernova O.F., Protopopov A.V., Boeskorov G.G., Pavlov I.S., Plotnikov V.V.	Doklady Biological Sciences, 292, 2020	0012-4966	ВАК; Ринц; Scopus	The first description of well-preserved fur of one male and one female cubs of the fossil cave lion <i>Panthera spelaea</i> (finds of 2017–2018, Semyuelyakh River, Yakutia, Russia) is presented in comparison with the fur of two cubs (a male and a female) of the extant African lion <i>P. leo</i> and adult lions of both species: the color, differentiation, configuration, microstructure, and internal design of hair of different categories are considered. The coat of the cave lion is similar but not identical to that of the African lion, because it contains a high thick undercoat of spiral-shaped thick and airy down hair. This difference is most pronounced in the cave lion cubs, in which, however, the fur is not differentiated to the same extent as in the adult. The microstructure of hair is species-specific and subject to intraspecific age-related variability. Adaptive features of the hair structure in the cave lion are noted.	Да (если в тексте публикации указано название ЦКП или УНУ)	93
14.	Статья в научном журнале	Genetic Specificity of the Siberian Forest Reindeer (<i>Rangifer tarandus valentinae</i> Flerov, 1932) of the Kuznetsk Alatau	10.1134/S0012496620050105	Vasilchenko A.A., Kholodova M.V., Baranova A.I., Naidenko S.V., et al.	Doklady Biological Sciences, 494, 2020	0012-4966	ВАК; Ринц; Scopus	This is the first study to show the genetic identity of the Altai-Sayan population of the Siberian forest reindeer of the Kuznetsk Alatau (<i>Rangifer tarandus valentinae</i>). The population is characterized by the existence of unique mitochondrial lines, the absence of signs of introgression of domestic deer mtDNA, as well as a low level of genetic diversity. In the sample studied, only two nucleotide substitutions (both of them transitions) were revealed, the nucleotide diversity ($\pi = 0.0015$) was almost ten times lower than in most populations of wild reindeer in Russia and was comparable only with that of some wild reindeer populations of Norway and Svalbard. The haplotype diversity (h) was also relatively low (-0.615).	Да (если в тексте публикации указано название ЦКП или УНУ)	261
15.	Статья в научном журнале	Hidden burrow associates: macrosymbiotic assemblages of subtidal deep-burrowing invertebrates in the northern part of the Sea of Japan	https://doi.org/10.1007/s12526-020-01065-9	Marin I., Antokhina T.	Marine Biodiversity, 50, 2020	1867-1616	ВАК; Ринц; Web of Science; Scopus	The activity of deep-burrowing macrofauna strongly influences all biogeochemical processes in sublittoral soft sediments. Despite this key role, these organisms are difficult to sample and, thus, often remain ignored in environmental studies. This study is the first in comprehensively exploring the diversity of the macrosymbiotic communities associated with the dominant subtidal deep-burrowing invertebrates from the southern part of the Russian coast of the Sea of Japan, represented by the species of the genera <i>Upogebia</i> Leach, 1814 (Arthropoda: Crustacea: Decapoda) and <i>Urechis</i> Seitz, 1907 (Annelida: Polychaeta: Echiura). The associated symbiotic communities mostly consist of obligate, host-specific species, while those species found in burrows of both hosts are probably using them just as refuges. Most symbionts occurred solitary or in heterosexual pairs, likely due to aggressive and strictly territorial behavior. This is certainly a hidden biodiversity, as more than half of the species reported here were not previously known from these “relatively simple and well-studied” boreal marine ecosystems. Our findings also allowed us to describe a new species belonging to the symbiotic genus <i>Hesperonoe</i> Chamberlin, 1919 (Annelida: Polychaeta: Polynoidae), based on morphological and molecular evidences, the latter being here presented for this genus for the first time.	Да (если в тексте публикации указано название ЦКП или УНУ)	2

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1	2	3	4	5	6	7	8	9	10	11
16.	Статья в научном журнале	Increasing contribution of peatlands to boreal evapotranspiration in a warming climate	https://doi.org/10.1038/s41558-020-0763-7	Helbig M, Waddington JM, Alekseychik P, Amiro BD, et al.	Nature Climate Change, 10 (6), 2020	1758-678X	БАК; Ринц; Web of Science; Scopus	The response of evapotranspiration (ET) to warming is of critical importance to the water and carbon cycle of the boreal biome, a mosaic of land cover types dominated by forests and peatlands. The effect of warming-induced vapour pressure deficit (VPD) increases on boreal ET remains poorly understood because peatlands are not specifically represented as plant functional types in Earth system models. Here we show that peatland ET increases more than forest ET with increasing VPD using observations from 95 eddy covariance tower sites. At high VPD of more than 2 kPa, peatland ET exceeds forest ET by up to 30%. Future (2091-2100) mid-growing season peatland ET is estimated to exceed forest ET by over 20% in about one-third of the boreal biome for RCP4.5 and about two-thirds for RCP8.5. Peatland-specific ET responses to VPD should therefore be included in Earth system models to avoid biases in water and carbon cycle projections.	Да (если в тексте публикации указано название ЦКП или УНУ)	0
17.	Статья в научном журнале	Inferring CO2 fertilization effect based on global monitoring land-atmosphere exchange with a theoretical model	https://doi.org/10.1088/1748-9326/ab79e5	Ueyama M., Ichii K., Kobayashi H., Kumagai T., et al.	Environmental Research Letters, 15 (8), 2020	1748-9326	БАК; Ринц; Web of Science; Scopus	Rising atmospheric CO2 concentration ([CO2]) enhances photosynthesis and reduces transpiration at the leaf, ecosystem, and global scale via the CO2 fertilization effect. The CO2 fertilization effect is among the most important processes for predicting the terrestrial carbon budget and future climate, yet it has been elusive to quantify. For evaluating the CO2 fertilization effect on land photosynthesis and transpiration, we developed a technique that isolated this effect from other confounding effects, such as changes in climate, using a noisy time series of observed land-atmosphere CO2 and water vapor exchange. Here, we evaluate the magnitude of this effect from 2000 to 2014 globally based on constraint optimization of gross primary productivity (GPP) and evapotranspiration in a canopy photosynthesis model over 104 global eddy-covariance stations. We found a consistent increase of GPP ($0.138 \pm 0.007\%$ ppm ⁻¹ ; percentile per rising ppm of [CO2]) and a concomitant decrease in transpiration ($-0.073\% \pm 0.006\%$ ppm ⁻¹) due to rising [CO2]. Enhanced GPP from CO2 fertilization after the baseline year 2000 is, on average, 1.2% of global GPP, 12.4 g C m ⁻² yr ⁻¹ or 1.8 Pg C yr ⁻¹ at the years from 2001 to 2014. Our result demonstrates that the current increase in [CO2] could potentially explain the recent land CO2 sink at the global scale.	Да (если в тексте публикации указано название ЦКП или УНУ)	0

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18.	Статья в научном журнале	Isotope evidence for latitudinal migrations of the dragonfly <i>Sympetrum fonscolombii</i> (Odonata: Libellulidae) in Middle Asia	10.1111/een.12930	Borisov S.N., Iakovlev I.K., Borisov A.S., Zuev A.G., Tiunov A.V.	Ecological Entomology, 45, 2020	0307-6946	БАК; Ринц; Web of Science; Scopus	1. <i>Sympetrum fonscolombii</i> dragonflies are believed to migrate seasonally. In the spring and early summer, the already-mature dragonflies arrive in Middle Asia for reproduction. In the late summer and autumn, summer-generation dragonflies migrate to the south. Their wintering places remain unknown. 2. Stable hydrogen ($\delta^2\text{H}$) and oxygen ($\delta^{18}\text{O}$) isotope analyses were conducted to confirm the migration of <i>S. fonscolombii</i> and determine the wintering area. Stable isotope composition of carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) in wings and legs was used to clarify the habitats in which dragonfly development took place. 3. Three cohorts of dragonflies collected in different regions of Middle Asia were used for analysis: (i) immigrants that arrived in the spring, (ii) residents that developed in Middle Asia, and (iii) transit dragonflies migrating to the south during autumn. 4. The average $\delta^2\text{H}$ values in the wings were significantly higher in immigrants (-96‰) than in residents (134‰) and transit individuals (-124‰). High $\delta^{18}\text{O}$ and $\delta^{15}\text{N}$ values in the tissue of immigrants confirmed their southerly origin. 5. Based on the species range and the global distribution of annual averages of $\delta^2\text{H}$ and $\delta^{18}\text{O}$ values in precipitation, the latitudinal migrations of <i>S. fonscolombii</i> were inferred to cover the area from the proposed natal regions of immigrants in South-West Asia (below $\sim 36^\circ\text{N}$) to Southern Ural and the south of Western Siberia in the north ($54\text{--}55^\circ\text{N}$) with a maximum migration distance of more than 4000 km.	Да (если в тексте публикации указано название ЦКП или УНУ)	1448

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1	2	3	4	5	6	7	8	9	10	11
19.	Статья в научном журнале	Level of soil moisture determines the ability of Eisenia fetida to reincorporate carbon from decomposed rice straw into the soil	https://doi.org/10.1016/j.ejsobi.2020.103209	Gorbunova A.Yu., Korobushkin D.I., Kostina N.V., Degtyarev M.I., Gongalsky K.B., Zaitsev A.S.	European Journal of Soil Biology, 99, 2020	1164-5563	БАК; Ринц; Web of Science; Scopus	Burning is the most common practice for rice straw disposal. Due to associated negative environmental and climatic effects, development of viable alternatives, preferably based on the natural functions of soil biota are needed. In the conditions of non-tropical rice-growing systems, where periods of flooding are very short, such an approach seems to be particularly promising. We carried out a mesocosm experiment to assess the possibility of using the model earthworm species Eisenia fetida (Savigny 1826) to decompose rice residues and control associated CO ₂ and CH ₄ emissions from paddy soils at different soil moisture levels. We filled 96 mesocosms with three types (32 each) of rice paddy soils collected in key regions of rice production in Russia: Krasnodarsky Krai (the Sea of Azov lowland, Calcic Phaeozems), the Republic of Kalmykia (the Volga river valley, Haplic Phaeozems) and Primorsky Krai (Khanka lake lowland, the Russian Far East, Umbric, Histic Fluvisols). We added 2.5 g dry rice straw in each mesocosm. The experiment had a full factorial design including three categorical factors: soil type (n = 3), soil moisture level (12, 25, 50 and 75% soil water holding capacity) and E. fetida earthworm addition (none and 4 individuals per mesocosm). The integral emission of CO ₂ across the observation period of 10 days significantly differed between moisture classes with the highest values at 25% (p < 0.05). Earthworm amendment had no effect on CO ₂ flux in all moisture treatments besides 75%, where it was positive. The detectable CH ₄ emissions were observed only at soil moisture levels of 50 and 75%. Earthworms strongly positively affected this parameter at 75% soil moisture level (p < 0.05). Carbon content after the experiment was significantly higher in the earthworm-inoculated microcosms only at the 25% moisture level. We conclude that E. fetida may positively contribute to carbon sequestration during rice straw degradation in the studied rice paddy soil types only under certain levels of substrate moisture (25% in our case). This highlights the importance of soil encountering abiotic conditions when developing climate-friendly systems for rice straw decomposition and carbon immobilization. It also suggests the potential of using E. fetida as a viable agent of biological rice straw recycling during the drained stages in non-tropical rice paddies or in artificial confinements.	Да (если в тексте публикации указано название ЦКП или УНУ)	5

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1	2	3	4	5	6	7	8	9	10	11
20.	Статья в научном журнале	Morphological and Molecular (COI mtDNA) Diversity of the Polyzonal Species of Grass Flies <i>Meromyza nigriseta</i> Fedoseeva, 1960 (Diptera: Chloropidae)	http://www.acta-zoologica-bulgarica.eu/002368	Triseleva T.A., Petrosyan V.G., Yatsuk A.A., Safonkin A.F.	Acta Zoologica Bulgarica, 72 (3), 2020	0324-0770	BAK; Ринц; Web of Science; Scopus	The population diversity of the Euro-Siberian species <i>Meromyza nigriseta</i> Fedoseeva, 1960 was analysed using morphometric and molecular genetic data obtained (COI mtDNA locus) based on 12 populations from the central part of its geographical range. The colour variations of the mid mesonotal stripes were insufficient for identification of inter-population diversity. The size of the anterior processes of postgonites (AP) and the unique sequence of the COI mtDNA gene can serve as markers of the population diversity. Seven haplotypes with genetic distance from 0.1 to 0.3% were identified. We recorded H1 haplotype in samples from all regions, except Tula (T), Brest (B) and Kaliningrad (Kl) populations. The load-graph in the plane of the principal components revealed a strong influence of the total (St) and main (Smap) part of AP. The Moscow (M) and Ural (Ur) populations of <i>M. nigriseta</i> differed most substantially from T and Kl populations by the projecting part of the area of AP (Spap), Smap and St. In addition, St of AP increased from Ur to the western population and Smap from U to Kl ones. <i>Meromyza nigriseta</i> originated in the grasslands and steppe ecosystems of Eastern Europe and then during the period from 44,000 to 130,000 years invaded new regions.	Да (если в тексте публикации указано название ЦКП или УНУ)	341
21.	Статья в научном журнале	Morphological peculiarities in the integument of enigmatic anomalurid gliders (Anomaluridae, Rodentia)	10.1111/joa.13211	Panyutina A.A., Chernova O.F., Soldatova I.B.	Journal of Anatomy, 237, 2020	0021-8782	BAK; Ринц; Web of Science; Scopus	Scaly-tailed squirrels, the most poorly known group of gliding mammals, hold the record for variety of remarkable integument peculiarities. One of the most striking of these features is the scales on the tail, which apparently allow them to reduce energy costs when positioning themselves on a tree trunk. No less interesting is a peculiar spur that supports the flying membrane: the unciform element ('spur'). Despite the peculiarity of such elements, their nature has not yet been studied. Using anatomical, histological methods and scanning electron microscopy we studied the structure of the skin and its derivatives in five of the six species from both genera of extant gliding scaly-tailed squirrels (Anomaluridae, Rodentia): <i>Idiurus macrotis</i> , <i>Idiurus zenkeri</i> , <i>Anomalurus beecrofti</i> , <i>Anomalurus pusillus</i> and <i>Anomalurus derbianus</i> . In addition to the common mammalian skin structures, such as hair, vibrissae, sebaceous glands, meibomian glands of eyelids and eccrine sweat glands of the palmar and plantar pads, these animals have unique species-specific skin derivatives (the tail scaly organ and its specific glands, vibrissae of the withers, patagium and its hair brush) that play a significant role in their adaptation to gliding and to their environment in general. The structure of the elbow spur is also described and hypotheses on its evolutionary origin from the tendon of the triceps muscle are presented.	Да (если в тексте публикации указано название ЦКП или УНУ)	406

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1	2	3	4	5	6	7	8	9	10	11
22.	Статья в научном журнале	On the taxonomic position of <i>Phaenomenella</i> Fraussen & Hadorn, 2006 (Neogastropoda, Buccinoidea) with description of two new species	doi.org/10.5252/zoosystema2020v42a3. http://zoosystema.com/42/3	Kantor Y., Kosyan A., Sorokin P., Fedosov A.	Zoosystema, 42 (3), 2020	1280-9551	БАК; Ринц; Web of Science; Scopus	This contribution provides novel information on the anatomy, radula and phylogeny of several species of <i>Phaenomenella</i> Fraussen & Hadorn, 2006, a genus of Buccinoidea Rafinesque, 1815 with unclear affinities. Molecular phylogenetic analysis based on sequences of mitochondrial COI and nuclear 28S rRNA genes of different representatives of Buccinoidea revealed close relationships of <i>Phaenomenella</i> with <i>Siphonalia</i> A. Adams, 1863 both taxa forming a clade with maximal support. The anatomy of two species of the latter genus was examined for the first time for comparative purposes. The subfamily Siphonaliinae Finlay, 1928 was erected for several Recent and fossil genera of Southern Hemisphere Buccinidae Rafinesque, 1815, and is still recognized by current taxonomists (Bouchet et al. 2017). Species of all Recent genera of Siphonaliinae were included in our analysis and the monophyly of the subfamily Siphonaliinae in its original scope is rejected. Molecular and morphological data revealed two still unnamed species of <i>Phaenomenella</i> from the lower bathyal zone of the South China Sea. These species, <i>Phaenomenella nicoi</i> n. sp. and <i>P. samadiae</i> n. sp. are described in the present study.	Да (если в тексте публикации указано название ЦКП или УНУ)	54

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23.	Статья в научном журнале	Partial revision of the neustonic genus Scapholeberis Schoedler, 1858 (Crustacea: Cladocera): decoding of the barcoding results	10.7717/peerj.10410	Garibian P.G., Neretina A.N., Taylor D.J., Kotov A.A.	PeerJ., 0, 2020	2167-8359	БАК; Ринц; Web of Science; Scopus	Water fleas (Crustacea: Cladocera) are among the most intensively studied freshwater invertebrates. However, ecologically important daphniids that live on the surface layer (neuston) remain taxonomically confused. Here we attempt to reconcile genetic and morphological information for the neustonic genus Scapholeberis Schoedler, 1858 (Cladocera: Daphniidae) and present the first revision of the Scapholeberis kingii species group. We analyzed new and existing mitochondrial DNA sequences (cytochrome C oxidase subunit I gene region) together with morphology for all but one of the known species of the neustonic daphniids. Morphological comparisons of available populations, belonging to the Scapholeberis kingii species group from several Australian, Asian and African localities, revealed, that they are almost identical according to parthenogenetic females. However, Australian populations can be reliably distinguished from Asian ones based on the morphology of gamogenetic females. Mitochondrial DNA data analyses revealed divergent lineages (>17% for the DNA barcoding COI region) for the three different species (Australia, Asia and Africa). Based on this set of data, we redescribed <i>S. kingii</i> Sars, 1888 from Australia, its terra typica, and described a new species, <i>S. smirnovi</i> sp. nov. from the Russian Far East, Korea and Japan. The status of populations from Ethiopia and the Republic of South Africa remained unclear, because in the African material and the putative type material, we found only parthenogenetic females. Our results provide an integrative revision of the <i>S. kingii</i> species group and improve the taxonomic scaffold used for barcoding and genomics for the remaining species groups in the daphniid genus Scapholeberis.	Да (если в тексте публикации указано название ЦКП или УНУ)	37

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24.	Статья в научном журнале	Peatland Development, Vegetation History, Climate Change and Human Activity in the Valdai Uplands (Central European Russia) during the Holocene: A Multi-Proxy Palaeoecological Study	10.3390/d12120462	Mazei Yu.A., Tsyganov A.N., Bobrovsky M.V., Mazei N.G., et al.	Diversity, 12, 2020	1424-2818	БАК; Ринц; Web of Science; Scopus	Peatlands are remarkable for their specific biodiversity, crucial role in carbon cycling and climate change. Their deposits preserve organism remains that can be used to reconstruct long-term ecosystem and environmental changes as well as human impact in the prehistorical and historical past. This study presents a new multi-proxy reconstruction of the peatland and vegetation development investigating climate dynamics and human impact at the border between mixed and boreal forests in the Valdai Uplands (the East European Plain, Russia) during most of the Holocene. We performed plant macrofossil, pollen, testate amoeba, Cladocera, diatom, peat humification, loss on ignition, carbon and nitrogen content, delta C-13 and delta N-15 analyses supported by radiocarbon dating of the peat deposits from the Krivetskiy Mokh mire. The results of the study indicate that the wetland ecosystem underwent a classic hydroserial succession from a lake (8300 BC-900 BC) terrestrialized through a fen (900 BC-630 AD) to an ombrotrophic bog (630 AD-until present) and responded to climate changes documented over the Holocene. Each stage was associated with clear changes in local diversity of organisms responding mostly to autogenic successional changes during the lake stage and to allogenic factors at the fen-bog stage. The latter can be related to increased human impact and greater sensitivity of peatland ecosystems to external, especially climatic, drivers as compared to lakes.	Да (если в тексте публикации указано название ЦКП или УНУ)	5

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25.	Статья в научном журнале	Phylogeny of dracunculoid nematodes (Chromadorea: Rhabditida: Spirurina: Dracunculoidea) from some Eurasian freshwater fishes	https://doi.org/10.11646/zootaxa.4858.4.3	Sokolov S.G., Kalmykov A.P., Malysheva S.V.	Zootaxa, 4858 (4), 2020	1175-5326	БАК; Ринц; Web of Science; Scopus	Sets of small ribosomal DNA (SSU rDNA) and large ribosomal DNA (LSU rDNA) sequences were obtained for <i>Philometroides moravec</i> Vismanis & Yunchis, 1994, <i>Philometra kotlani</i> (Molnár, 1969), <i>Philometra rischta</i> Skrjabin, 1923, <i>Philometra</i> cf. <i>obturans</i> (Prenant, 1886) (Philometridae), <i>Sinoichthyonema amuri</i> (Garkavi, 1972), <i>Agrachanus scardinii</i> (Molnár, 1966), <i>Kalmanmolnaria intestinalis</i> (Dogiel & Bychowsky, 1934) and <i>Skrjabillanus tincae</i> Shigin & Shigina, 1958 (Skrjabillanidae). Phylogenetic analysis of SSU rDNA data shows that dracunculoid nematodes are divided into two well-supported clades designated as Clade I and Clade II, respectively. Clade I includes the type species of the genus <i>Philonema</i> Kuitunen-Ekbaum, 1933, some species from the family Daniconematidae Moravec & Køie, 1987 and two subfamilies of skrjabillanids, <i>Skrjabillaninae</i> Shigin & Shigina, 1958 and <i>Esocineminae</i> Moravec, 2006. Clade II unites species from the families Dracunculidae Stiles, 1907, Micropleuridae Baylis & Daubney, 1926 and Philometridae Baylis & Daubney, 1926. Within the Philometridae, there are several well-supported groups of species, one of which unites freshwater <i>Philometra</i> spp. from the Palearctic cyprinids, identified as <i>P. kotlani</i> , <i>P. rischta</i> , <i>P. ovata</i> (Zeder, 1803) and <i>P. cyprinirutili</i> (Creplin, 1825). However, the phylogenetic relationships of most philometrids are unresolved. An analysis of partial SSU and LSU rDNA sequences indicates that there is no direct phylogenetic relationship between <i>Agrachanus</i> Tikhomirova, 1971 (type species <i>Skrjabillanus scardinii</i> Molnár, 1966) and <i>Skrjabillanus</i> Shigin & Shigina, 1958 (type species <i>Sk. tincae</i>), which means that the genus <i>Agrachanus</i> can be resurrected. Our study confirms that <i>Philonematinae</i> Ivashkin, Sobolev & Khromova, 1971 should be elevated to the family rank. We formally establish the family <i>Philonematidae</i> Ivashkin, Sobolev & Khromova, 1971 stat. nov. We also suggest combining the superfamilies <i>Dracunculoidea</i> Stiles, 1907 and <i>Camallanoidea</i> Railliet & Henry, 1915 into the infraorder <i>Camallanomorpha</i> Roberts, Janovy & Nadler, 2013.	Да (если в тексте публикации указано название ЦКП или УНУ)	535

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26.	Статья в научном журнале	Pleistocene Branchiopods (Cladocera, Anostraca) from Transbaikalian Siberia Demonstrate Morphological and Ecological Stasis	10.3390/w12113063	Zharov A.A., Neretina A.N., Rogers D.C., Reshetova S.A., et al.	Water, 12, 2020	2073-4441	БАК; Ринц; Web of Science; Scopus	Pleistocene water bodies have been studied using the paleolimnological approach, which traces environmental changes using particular microfossils as ecological proxies, rather than analysis of the paleocommunities themselves. Within a given taphocoenosis, the presence and quantity of animals are related to environmental conditions rather than to community types where relationships between taxa are stabilized during their long-term co-occurrence and are (at least partially) more important than the particular environmental conditions at the time of deposition, which may have experienced significant seasonal and inter-seasonal variations. Here, we analyze Branchiopoda (Crustacea) of two paleolocalities in the Transbaikalian Region of Russia: Urtuy (MIS3) and Nozhiy (older than 1.5 million years). Cladocerans <i>Daphnia</i> (<i>Ctenodaphnia</i>) <i>magna</i> , <i>D. (C.) similis</i> , <i>D. (Daphnia)</i> <i>pulex</i> , <i>Ceriodaphnia pulchella-reticulata</i> , <i>C. laticaudata</i> , <i>Simocephalus</i> sp., <i>Moina</i> cf. <i>brachiata</i> , <i>M. macropopa</i> clade, <i>Chydorus</i> cf. <i>sphaericus</i> , <i>Capmtocercus</i> sp. and anostracans <i>Branchinecta</i> cf. <i>paludosa</i> , and <i>Streptocephalus</i> (<i>Streptocephalus</i>) sp. are found in two localities. With the exception of the last taxon, which now occurs in the southern Holarctic, all other taxa inhabit the Transbaikalian Region. Within Eurasia, the steppe zone has the greatest diversity of large branchiopods and a high diversity of some cladocerans, such as subgenus <i>Daphnia</i> (<i>Ctenodaphnia</i>) and <i>Moina</i> sp. Here we demonstrated that the branchiopod community in shallow steppe water bodies has been unchanged since at least the Pleistocene, demonstrating long-term morphological and ecological stasis.	Да (если в тексте публикации указано название ЦКП или УНУ)	9

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27.	Статья в научном журнале	Position of <i>Moina wierzejskii</i> Richard, 1895 (Crustacea: Cladocera) within the genus <i>Moina</i> Baird, 1850 in the light of new morphological data	https://doi.org/10.11646/zootaxa.4820.3.5	Neretina A.N., Kirdyasheva A.G., Kotov A.A.	Zootaxa, 4820 (3), 2020	1175-5326	БАК; Ринц; Web of Science; Scopus	The family Moinidae (Crustacea: Cladocera) is intensively studied recently. Last genetic investigations revealed a huge diversity of species in the genus <i>Moina</i> Baird, 1850, comparable with the number of species in the genus <i>Daphnia</i> O.F. Müller, 1776. However, unlike daphniids, the taxonomy of moinids is understudied. Along with new still undescribed species, there are many inadequately described and illegitimately forgotten taxa within Moinidae. Moinids of tropical and subtropical regions remain especially poorly studied, and their features are ignored in recent intergeneric systems. Here we redescribe the morphology of <i>M. wierzejskii</i> Richard, 1895, a peculiar <i>Moina</i> from the New World, and discuss its position within the genus <i>Moina</i> s.l. In the taxonomic scheme, designed for European moinids, <i>M. wierzejskii</i> takes an intermediate position between subgenera <i>Exomoina</i> Hudec, 2010 and <i>Moina</i> s.str. Similarly to European species belonging to <i>M. (Exomoina)</i> , females of <i>M. wierzejskii</i> have a modified <i>Ilyocryptus</i> -like labrum and an ephippium with two resting eggs. However, the males have no exopod on the thoracic limb I which suggests that this species is closer to the subgenus <i>Moina</i> s.str. The lack of exopod on male thoracic limb I was also marked in another species of the genus from the New World, <i>M. hutchinsoni</i> Brehm, 1937. To date such unusual combination of morphological features is unknown for any moinids from the Old World and Australia. We hope that our observations will stimulate deep phylogenetic studies of peculiar moinids inhabiting the New World.	Да (если в тексте публикации указано название ЦКП или УНУ)	520

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28.	Статья в научном журнале	Radula formation in two species of Conoidea (Gastropoda)	https://doi.org/10.1002/jmor.21250	Vortsepneva E., Herbert D.G., Kantor Y.	Journal of Morphology, 0, 2020	0362-2525	не индексируется	The radula is the basic feeding structure in gastropod molluscs and exhibits great morphological diversity that reflects the exceptional anatomical and ecological diversity occurring in these animals. This uniquely molluscan structure is formed in the blind end of the radular sac by specialized cells (membranoblasts and odontoblasts). Secretion type, and the number and shape of the odontoblasts that form each tooth characterize the mode of radula formation. These characteristics vary in different groups of gastropods. Elucidation of this diversity is key to identifying the main patterns of radula formation in Gastropoda. Of particular interest would be a phylogenetically closely related group that is characterized by high variability of the radula. One such group is the large monophyletic superfamily Conoidea, the radula of which is highly variable and may consist of the radular membrane with five teeth per row, or the radular membrane with only two or three teeth per row, or even just two harpoon-like teeth per row without a radular membrane. We studied the radulae of two species of Conoidea (<i>Clavus maestratii</i> Kilburn, Fedosov & Kantor, 2014 [Drilliidae] and <i>Lophiotoma acuta</i> (Perry, 1811) [Turridae]) using light and electron microscopy. Based on these data and previous studies, we identify the general patterns of the radula formation for all Conoidea: the dorsolateral position of two groups of odontoblasts, uniform size, and shape of odontoblasts, folding of the radula in the radular sac regardless of the radula configuration. The morphology of the subradular epithelium is most likely adaptive to the radula type.	Да (если в тексте публикации указано название ЦКП или УНУ)	19
29.	Статья в научном журнале	Research on Aircraft Collisions with Birds According to Identification Examinations in 2002-2019	10.1134/S1062359020060126	Silaeva O.L., Kholodova M.V., Sviridova T.V., Bukreev S.A., Varaksin A.N.	Zootaxa, 47 (6), 2020	1062-3590	ВАК; Ринц; Web of Science; Scopus	The results of research on identification of bird species involved in collisions mainly with aircraft of the Aeroflot-Russian Airlines Public Joint-Stock Company are presented. Identification examination as a complex study includes DNA analysis, as well as examination of the macro- and microstructure of a group of feathers, a single feather, or a fragment of one. The bird strike location is established. The reasons and factors leading to the appearance of a species at the airfield are considered, and brief recommendations are given to minimize bird strikes at the airfield. During this period, 32 species of ten bird orders involved in strikes were identified. It was found that most collisions occurred with the orders Charadriiformes (mostly with gulls), Falconiformes, and Apodiformes. It is noted that more than 90% of collisions occur at the airport or in its vicinity; there are half again as many more strikes during taking off than during landing. The largest number of collisions takes place in spring and summer time and during daylight hours. The engine, nose cone, and fuselage mainly suffer from bird collisions.	Да (если в тексте публикации указано название ЦКП или УНУ)	625

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30.	Статья в научном журнале	Review of the abyssohadal genus <i>Bayerius</i> (Gastropoda: Neogastropoda: Buccinidae) from the North-West Pacific, with description of two new species	https://doi.org/10.1016/j.dsr.2020.103256	Kantor Yu.I., Kosyan A., Sorokin P., Herbert D.G., Fedosov A.	Deep-Sea Research Part I: Oceanographic Research Papers, 160, 2020	0967-0637	БАК; Ринц; Web of Science; Scopus	The abyssal and hadal Buccinoidea from the north-western Pacific formerly attributed to the genera <i>Tacita</i> and <i>Calliloncha</i> were analyzed for the first time using both multilocus molecular and morphological data. The results allow re-evaluation of the inter- and intrageneric variability of morphological characters and demonstrate that <i>Tacita</i> , <i>Calliloncha</i> and <i>Paracalliloncha</i> are synonyms of <i>Bayerius</i> , a genus widely distributed in the Pacific Ocean. In our reconstructed phylogeny the genus forms a maximally supported clade with <i>Pararetifusus tenuis</i> and <i>Turrisiphon dalli</i> . At present, <i>Bayerius</i> includes 10 species, two of which are described herein as new to science, <i>B. inflatus</i> sp. nov. and <i>B. nekrasovorum</i> sp. nov. with one additional undescribed species represented in our material by a single specimen. The genus is reviewed, with the addition of new data on anatomy and distribution, based on newly obtained material. <i>B. peruvianus</i> is synonymized with <i>B. zenkewitchi</i> . <i>Calliloncha nankaiensis</i> together with <i>Costaria crosnieri</i> are attributed to a new genus, <i>Warenius</i> gen. nov., which clusters with several genera of Buccinoidea from biogenic substrata.	Да (если в тексте публикации указано название ЦКП или УНУ)	24
31.	Статья в научном журнале	Semi-dwarf woolly mammoths from the East Siberian Sea coast, continental Russia	10.1111/bor.12431	Kirilova I.V., Borisova O.K., Chernova O.F., van Kolfschoten T., et al.	<i>Boreas</i> , 49, 2020	0300-9483	БАК; Ринц; Web of Science; Scopus	Apioneer comprehensive study of several diminutive last-generation woolly mammoth teeth (M3) found on the coast of the East Siberian Sea between the mouths of the Alazeya and Malaya Kuropatoch'ya rivers was conducted. Two teeth belonged to one individual. These teeth have a similar lamellar frequency and enamel thickness as teeth of <i>Mammuthus primigenius</i> Blumenbach. The molar crowns from the lower Alazeya region are similar in size to those of the small Late Pleistocene-Holocene mammoths from Wrangel Island. However, the number of plates (17-19, excluding talons) is much lower than that in the teeth of typical Late Pleistocene <i>M. primigenius</i> (23-25). The age data of the examined teeth are beyond the limits of the ¹⁴ C dating method (>45 000 years BP). Nevertheless, palaeobotanical data allow correlation of the enclosing sediments with the warm Kazantsevo Interglacial (Eemian, MIS 5e) and reconstruction of the average annual temperature, which was warmer than present-day temperatures. These conditions are confirmed by the δ ¹⁸ O isotopes from the structurally bound carbonate in tooth enamel. The ancient landscape was wetter and more forested than modern landscapes. The diminution of M3 size and loss of posterior plates were a result of the overall decrease in body size, likely in response to landscape change and narrowing of resource space. Mammoths from the lower Alazeya region demonstrate a stage of significant size reduction, although the dwarfing was not finalized. Their teeth are the oldest amongst the small teeth found in west Beringia.	Да (если в тексте публикации указано название ЦКП или УНУ)	282

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32.	Статья в научном журнале	Sensitivity of gross primary productivity to climatic drivers during the summer drought of 2018 in Europe	https://doi.org/10.1098/rsfb.2019.0747	Fu Z, Ciaia P, Bastos A, Stoy PC, et al.	Philosophical Transactions of the Royal Society B: Biological Sciences, 375 (1810), 2020	0962-8436	БАК; Ринц; Web of Science; Scopus	In summer 2018, Europe experienced a record drought, but it remains unknown how the drought affected ecosystem carbon dynamics. Using observations from 34 eddy covariance sites in different biomes across Europe, we studied the sensitivity of gross primary productivity (GPP) to environmental drivers during the summer drought of 2018 versus the reference summer of 2016. We found a greater drought-induced decline of summer GPP in grasslands (-38%) than in forests (-10%), which coincided with reduced evapotranspiration and soil water content (SWC). As compared to the 'normal year' of 2016, GPP in different ecosystems exhibited more negative sensitivity to summer air temperature (Ta) but stronger positive sensitivity to SWC during summer drought in 2018, that is, a stronger reduction of GPP with soil moisture deficit. We found larger negative effects of Ta and vapour pressure deficit (VPD) but a lower positive effect of photosynthetic photon flux density on GPP in 2018 compared to 2016, which contributed to reduced summer GPP in 2018. Our results demonstrate that high temperature-induced increases in VPD and decreases in SWC aggravated drought impacts on GPP. This article is part of the theme issue 'Impacts of the 2018 severe drought and heatwave in Europe: from site to continental scale'.	Нет	0
33.	Статья в научном журнале	Soils and Nitrogen Nutrition of Plants in Alpine Ecosystems of the Northwest Caucasus under Long-Term Increase in Availability of Biogenic Elements	10.1134/S1064229320080116	Makarov M.I., Onipchenko V.G., Tiunov A.V., Malysheva T.I., Kadulin M.S.	Eurasian Soil Science, 53 (8), 2020	1064-2293	БАК; Ринц; Web of Science; Scopus	An experiment with the enrichment of acid organic-rich mountain-meadow soils (Umbric Leptosols) of alpine ecosystems with mineral nutrients has demonstrated that the contents of organic carbon, total nitrogen, and labile organic compounds are stable and tolerant towards long-term (20 years) application of mineral fertilizers. Only the following direct effects are well pronounced: an increase in the content of inorganic nitrogen and phosphorus after the application of corresponding fertilizers, as well as a rise in pH as a result of liming. Plants are more sensitive indicators of changes in the conditions of nitrogen nutrition. They are characterized by active absorption of additional nitrogen, and the isotopic composition of nitrogen in them becomes heavier. The degree of these effects depends on the initial nitrogen availability. In addition to these direct effects, changes in the nitrogen status of plants also reflect changes in the transformation of nitrogen-containing compounds in soil and in the nitrogen nutrition of plants taking place due to an increased availability of phosphorus and lower acidity under the most phosphorus-depleted and most acid conditions, respectively. These impacts lead to the mobilization of soil organic nitrogen and are likely to reduce the role of mycorrhiza in plant nitrogen nutrition. As a result, a heavier isotopic composition of nitrogen is formed in some plant species.	Да (если в тексте публикации указано название ЦКП или УНУ)	1175

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34.	Статья в научном журнале	SoilTemp: A global database of near-surface temperature	https://doi.org/10.1111/gcb.15123	Lembrechts JJ, Aalto J, Ashcroft MB, De Frenne P, et al.	Global Change Biology, 26, 2020	1354-1013	ВАК; Ринц; Web of Science; Scopus	Current analyses and predictions of spatially explicit patterns and processes in ecology most often rely on climate data interpolated from standardized weather stations. This interpolated climate data represents long-term average thermal conditions at coarse spatial resolutions only. Hence, many climate-forcing factors that operate at fine spatiotemporal resolutions are overlooked. This is particularly important in relation to effects of observation height (e.g. vegetation, snow and soil characteristics) and in habitats varying in their exposure to radiation, moisture and wind (e.g. topography, radiative forcing or cold-air pooling). Since organisms living close to the ground relate more strongly to these microclimatic conditions than to free-air temperatures, microclimatic ground and near-surface data are needed to provide realistic forecasts of the fate of such organisms under anthropogenic climate change, as well as of the functioning of the ecosystems they live in. To fill this critical gap, we highlight a call for temperature time series submissions to SoilTemp, a geospatial database initiative compiling soil and near-surface temperature data from all over the world. Currently, this database contains time series from 7,538 temperature sensors from 51 countries across all key biomes. The database will pave the way toward an improved global understanding of microclimate and bridge the gap between the available climate data and the climate at fine spatiotemporal resolutions relevant to most organisms and ecosystem processes.	Нет	0
35.	Статья в научном журнале	Stable C and N Isotope Composition of Suspended Particulate Organic Matter in the Neva Estuary: The Role of Abiotic Factors, Productivity, and Phytoplankton Taxonomic Composition	10.3390/jmse8120959	Golubkov M.S., Nikulina V.N., Tiunov A.V., Golubkov S.M.	Journal of Marine Science and Engineering, 8, 2020	2077-1312	ВАК; Ринц; Web of Science; Scopus	Knowledge of carbon and nitrogen isotopic ratios in organic matter and their changes is important when studying nutrient cycles in aquatic ecosystems. Relationships between $\delta^{13}C$ and $\delta^{15}N$ values of suspended particulate organic matter (POM), water temperature, salinity, pH, redox potential, chlorophyll a concentration, primary production, and biomasses of different taxonomic groups of phytoplankton in the Neva Estuary were statistically analyzed. We tested the hypothesis that the studied physicochemical and biogeochemical characteristics, as well as the species composition of phytoplankton and its productivity, can be significant predictors of changes in the isotopic ratios of suspended particulate organic matter in estuaries. In the Neva Estuary, $\delta^{13}CPOM$ (-16.8- -27.6%) and $\delta^{15}NPOM$ (2.3-7.3%) changed synchronously. Statistical analysis showed that for both isotopes, the photosynthetic activity and taxonomic composition of phytoplankton are important. For $\delta^{13}CPOM$, the second most important factor was water salinity, which was apparently associated with the transition of algae from CO_2 to HCO_3^- consumption during photosynthesis in estuarine waters. For $\delta^{15}NPOM$ changes, the most important abiotic factor was pH. The study showed that the dependences of POM isotopic ratios on environmental variables obtained for continental and oceanic waters are also valid in transitional zones such as the Neva Estuary.	Да (если в тексте публикации указано название ЦКП или УНУ)	4

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36.	Статья в научном журнале	Suboccipital muscle of sharpnose sevengill shark <i>Heptranchias perlo</i> and its possible role in prey dissection	10.1002/jmor.21142	Kryukova N.V., Kuznetsov A.N.	Journal of Morphology, 281, 2020	0362-2525	БАК; Ринц; Web of Science; Scopus	Skull and head muscles of <i>Heptranchias perlo</i> were studied. Its distinctive features include the suboccipital muscles, described for the first time, the absence of the palatoquadrate symphysis, a longitudinally extended mouth, and teeth unsuited for dissecting prey in typical method of modern sharks, which is cutting motions powered by head shaking from side to side. The palatoquadrate cartilages of <i>H. perlo</i> and closely related Hexanchidae articulate with the neurocranium via orbital and postorbital articulations, which together allow for lateral expansion of the jaws, but restrict retraction and protraction. We interpret these features as an adaptation to a different method of prey dissection, that is, ripping in a backward pull. It employs the specific postorbital articulation together with the suboccipital muscles as forcetransmitting devices, and is powered by swimming muscles which produce a rearward thrust of the tail. During this type of dissection, the anterior part of the vertebral column should experience a tensile stress which explains the replacement of rigid vertebral bodies by a collagenous sheath around the notochord in <i>H. perlo</i> . The backwardripping dissection could have been common among ancient Elasmobranchii based on the similarly developed postorbital articulation, a longitudinally extended mouth, and the absence of the palatoquadrate symphysis. A biomechanical comparison with the extinct <i>Pucapampella</i> indicates that ancient elasmobranchs could be also specialized in the backward-ripping prey dissection, but their mechanism was different from that inferred for <i>H. perlo</i> . We suggest that in the early evolution of sharks this mechanism was replaced by head-shaking dissection and then later was restored in <i>H. perlo</i> on a new morphological basis. A new position of the postorbital articulation below the vertebral axis is fraught with the braincase elevation when backward ripping the prey, and as a counter-mean, requires formation of suboccipital portions of the axial musculature unknown in other sharks. Homology and origin of these portions is considered.	Да (если в тексте публикации указано название ЦКП или УНУ)	859

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37.	Статья в научном журнале	The biophysical climate mitigation potential of boreal peatlands during the growing season	https://doi.org/10.1088/1748-9326/ab34	Helbig, M, Waddington J., Alekseychik P., Amiro B., et al.	Environmental Research Letters, 15, 2020	1748-9326	БАК; Ринц; Web of Science; Scopus	Peatlands and forests cover large areas of the boreal biome and are critical for global climate regulation. They also regulate regional climate through heat and water vapour exchange with the atmosphere. Understanding how land-atmosphere interactions in peatlands differ from forests may therefore be crucial for modelling boreal climate system dynamics and for assessing climate benefits of peatland conservation and restoration. To assess the biophysical impacts of peatlands and forests on peak growing season air temperature and humidity, we analysed surface energy fluxes and albedo from 35 peatlands and 37 evergreen needleleaf forests—the dominant boreal forest type—and simulated air temperature and vapour pressure deficit (VPD) over hypothetical homogeneous peatland and forest landscapes. We ran an evapotranspiration model using land surface parameters derived from energy flux observations and coupled an analytical solution for the surface energy balance to an atmospheric boundary layer (ABL) model. We found that peatlands, compared to forests, are characterized by higher growing season albedo, lower aerodynamic conductance, and higher surface conductance for an equivalent VPD. This combination of peatland surface properties results in a ~20% decrease in afternoon ABL height, a cooling (from 1.7 to 2.5 °C) in afternoon air temperatures, and a decrease in afternoon VPD (from 0.4 to 0.7 kPa) for peatland landscapes compared to forest landscapes. These biophysical climate impacts of peatlands are most pronounced at lower latitudes (~45°N) and decrease toward the northern limit of the boreal biome (~70°N). Thus, boreal peatlands have the potential to mitigate the effect of regional climate warming during the growing season. The biophysical climate mitigation potential of peatlands needs to be accounted for when projecting the future climate of the boreal biome, when assessing the climate benefits of conserving pristine boreal peatlands, and when restoring peatlands that have experienced peatland drainage and mining.	Нет	0

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38.	Статья в научном журнале	The earthworm species <i>Eisenia fetida</i> accelerates the decomposition rate of cigarette butts on the soil surface	https://doi.org/10.1016/j.soilbio.2020.108022	Korobushkin D.I., Garibian P.G., Pelgunova L.A., Zaitsev A.S.	Soil Biology and Biochemistry, 151, 2020	0038-0717	БАК; Ринц; Web of Science; Scopus	Cigarette butts (CBs) represent the most common, though poorly biodegradable, type of waste on Earth. Thrown on the soil surface, they can remain unchanged for years, poisoning surrounding ecosystems with toxins accumulated during the smoking process. However, there is practically no data on the effect of smoked CBs on soil biota or soil animals in particular, nor on the potential of edaphic fauna to facilitate their decomposition. One of the most promising agents among soil animals are earthworms, which are known to be beneficial in the processes of recalcitrant organic matter degradation and stimulation of microbial activity in detrital food webs. In a microcosm experiment with the sod podzolic soil, we aimed at testing the effect of the commonly cultured epigeic earthworm <i>Eisenia fetida</i> (Savigny 1826) on the biodegradation rate of CBs and the possible adverse effects of this waste on the species. The experiment had a full-factorial design with three categorical predictors: CB number (0, 1 and 3 per microcosm); smoking condition (smoked and unsmoked CBs) and two levels of earthworm amendment (0 and 4 per microcosm). During 70 days of the experiment, we did not observe any smoked CB-induced mortality of earthworms. The addition of <i>E. fetida</i> significantly increased the CB mass loss across all treatment combinations. Specifically, earthworms improved the decomposition rate from 30 to 36% ($p < 0.05$), on average. However, this improvement was mainly associated with CB paper wrapping consumption. The inhibition of CO ₂ emission in microcosms with CBs and earthworms suggested the direct consumption of this waste by <i>E. fetida</i> , rather than modulation of the degradation potential of a microbial community. <i>E. fetida</i> appears to thus be a moderately promising agent for CB biodegradation with the simultaneous reduction in carbon loss from soil through the microbial channel in the studied soil type. These results open perspectives for the further evaluation of the role of soil macroinvertebrates in recalcitrant organic waste management in general and CBs in particular. Summary: we demonstrated that earthworms can efficiently decompose smoked and unsmoked cigarette butts regardless of their toxic potential and simultaneously reduce associated microbial activity.	Да (если в тексте публикации указано название ЦКП или УНУ)	5

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39.	Статья в научном журнале	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data	https://doi.org/10.1038/s41597-020-0534-3	Pastorello G., Trotta C., Canfora E., Cheah Y., et al.	SCIENTIFIC DATA, 7, 2020	2052-4463	БАК; Ринц; Web of Science; Scopus	The FLUXNET2015 dataset provides ecosystem-scale data on CO ₂ , water, and energy exchange between the biosphere and the atmosphere, and other meteorological and biological measurements, from 212 sites around the globe (over 1500 site-years, up to and including year 2014). These sites, independently managed and operated, voluntarily contributed their data to create global datasets. Data were quality controlled and processed using uniform methods, to improve consistency and intercomparability across sites. The dataset is already being used in a number of applications, including ecophysiology studies, remote sensing studies, and development of ecosystem and Earth system models. FLUXNET2015 includes derived-data products, such as gap-filled time series, ecosystem respiration and photosynthetic uptake estimates, estimation of uncertainties, and metadata about the measurements, presented for the first time in this paper. In addition, 206 of these sites are for the first time distributed under a Creative Commons (CC-BY 4.0) license. This paper details this enhanced dataset and the processing methods, now made available as open-source codes, making the dataset more accessible, transparent, and reproducible.	Нет	0
40.	Статья в научном журнале	The Indo-Pacific <i>Amalda</i> (Neogastropoda, Olivioidea, Ancillariidae) revisited with molecular data, with special emphasis on New Caledonia	https://doi.org/10.5852/ejt.2020.706	Kantor Y., Castelin M., Fedosov A., Bouchet P.	European Journal of Taxonomy, 706, 2020	2118-9773	БАК; Ринц; Web of Science; Scopus	In the ancillariid genus <i>Amalda</i> , the shell is character rich and 96 described species are currently treated as valid. Based on shell morphology, several subspecies have been recognized within <i>Amalda hilgendorfi</i> , with a combined range extending at depths of 150–750 m from Japan to the South-West Pacific. A molecular analysis of 78 specimens from throughout this range shows both a weak geographical structuring and evidence of gene flow at the regional scale. We conclude that recognition of subspecies (<i>richeri</i> Kilburn & Bouchet, 1988, <i>herlaari</i> van Pel, 1989, and <i>vezzaroi</i> Cossignani, 2015) within <i>A. hilgendorfi</i> is not justified. By contrast, <i>hilgendorfi</i> -like specimens from the Mozambique Channel and New Caledonia are molecularly segregated, and so are here described as new, as <i>Amalda miriky</i> sp. nov. and <i>A. cacao</i> sp. nov., respectively. The New Caledonia <i>Amalda montrouzieri</i> complex is shown to include at least three molecularly separable species, including <i>A. allaryi</i> and <i>A. alabaster</i> sp. nov. Molecular data also confirm the validity of the New Caledonia endemics <i>Amalda aureomarginata</i> , <i>A. fuscolingua</i> , <i>A. bellonarum</i> , and <i>A. coriolis</i> . The existence of narrow range endemics suggests that the species limits of <i>Amalda</i> with broad distributions, extending, e.g., from Japan to Taiwan (<i>A. hinomotoensis</i>) or even Indonesia, the Strait of Malacca, Vietnam and the China Sea (<i>A. mamillata</i>) should be taken with caution.	Да (если в тексте публикации указано название ЦКП или УНУ)	56

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41.	Статья в научном журнале	Two cryptic species of Lotus (Fabaceae) from the Iberian Peninsula		Kramina T.E., Samigullin T.H., Meschersky I.G.	Wulfenia, 27, 2020	1561-882X	БАК; Ринц; Web of Science; Scopus	The problem of cryptic species is well known in taxonomy of different groups of organisms, including plants, and their recognition can contribute to the assessment of global biodiversity and the development of conservation methods. Analyses of Lotus glareosus and related taxa from the Iberian Peninsula based on various types of data (i.e. sequences of nuclear ribosomal ITS-1-2, 5'ETS and cpDNA trnL-F, seven loci of nuclear microsatellites) revealed that the material earlier determined as 'L. glareosus' is subdivided into two genetically distant groups: L. carpetanus, related to L. conimbricensis, and L. glareosus, included in the L. corniculatus complex. Though only slight morphological distinctions were found between them, significant genetic differences comparable to those between sections of the genus Lotus (p-distance 0.07- 0.08 in ITS, 0.060 - 0.067 in ETS and 0.010 - 0.013 in trnL-F; substitution number 43 - 47 bp in ITS, 22-24 bp in ETS and 12-14 bp in trnL-F) and no evidence of genetic exchange suggest that these groups may represent two deeply diverged lineages that should be treated as two separate species. This example corresponds to the concept of cryptic species. Based on molecular study of type specimens of L. carpetanus, we propose to reestablish this name, previously synonymized with L. glareosus.	Нет	0
42.	Статья в научном журнале	Two new species of Phasmarhabditis Andrassy, 1976 (Nematoda: Rhabditidae) associated with land snails in Northwest Caucasus, Russian Federation: description and molecular affiliation	10.1163/15685411-00003299	Ivanova E.S., Geraskina A.P., Spiridonov S.E.	Nematology, 22, 2020	1388-5545	БАК; Ринц; Web of Science; Scopus	Two new nematode species of Phasmarhabditis were isolated from land snails in North and West Caucasus, Russian Federation. Phasmarhabditis circassica sp. n. originated from Oxychilus sp. collected by the Nickel settlement in the Adygea Republic while P. clausiliiae sp. n. came from Clausiliidae gen. sp. in the Stavropol district. Phasmarhabditis circassica sp. n. is characterised morphologically by male spicules with a hollow tip, a widely conoid, spicate female tail, ensheathed dauer juveniles 896 (813-982) µm long with a tiny but distinct cuticular apical cap and a long filamentous tail, and exsheathed dauers 773 (670-950) µm long with a tail half as long as in the ensheathed dauers and with a rounded tip. Phasmarhabditis clausiliiae sp. n. is very close to P. circassica sp. n. in having similar morphological traits and is differentiated mainly in having a longer female tail of 94 (79-111) vs 82 (54-125 µm) and the much smaller ratio c of 13.7 (10.3-18.4) vs 22.7 (16.8-27.5) and by its molecular characteristics. The molecular analysis based on partial sequences of LSU rDNA, and ITS rDNA regions has been performed and showed that the closest match for both new species was P. bohémica. Despite the morphological similarity between the species described, significant difference between these two new species was reported both for LSU rDNA and ITS rDNA.	Да (если в тексте публикации указано название ЦКП или УНУ)	195

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43.	Статья в научном журнале	Use of ASD-2F in Feeding the Texas Quail Breed		Kozyrev S.G., Khatsaeva R.M., Jawad S.A.J., Kvochko A.N., et al.	Indian Journal of Ecology, 47, 2020	0304-5250	БАК; Scopus	The experiment was carried out on comparative influence of the antiseptic-stimulant Dorogov on the dynamics of live weight gain in quails. Three groups were formed: 1 control and 2-3 experimental group (the 2nd experimental group received ASD-2F according to the 2-fold regimen using the drug at a dosage of 0-5 days-0.5 ml l and 20-25 days-1.0 ml l ; 3rd experimental group of ASD-2F for the feeding period -1 -1 was asked 3 times, in a dosage for 0-5 days -0.5 ml l ; 15-20 days-1.0 ml l and on 30-35 days-1.0 ml l). Throughout the entire experimental -1 -1 period, more intense dynamics of gaining live weight in the birds of the experimental groups was found. The most intensive indicators of the dynamics of gain in live weight were recorded in quails of the 3rd experimental group. At 50 days of age the live weight in the bird of was 338.58, 350.58, 367.85, in control, 2nd and 3rd experimental groups. The introduction of ASD-2F into the diet during the feeding period contributes to an increase in relative growth of 3.18%, absolute growth of 10.11% and average daily growth of 4.78%, respectively.	Нет	0
44.	Статья в научном журнале	АЗОТНОЕ ПИТАНИЕ РАСТЕНИЙ АЛЬПИЙСКОЙ ЛИШАЙНИКОВОЙ ПУСТОШИ В УСЛОВИЯХ ОБОГАЩЕНИЯ ПОЧВЫ ЭЛЕМЕНТАМИ МИНЕРАЛЬНОГО ПИТАНИЯ	10.31857/S0367059720020080	Макаров М.И., Лавренов Н.Г., Онипченко В.Г., Тиунов А.В., и др.	Экология (Russian Journal of Ecology), 2, 2020	1067-4136	ВАК; Ринц; Web of Science; Scopus	Результаты длительного эксперимента с обогащением почвы альпийской лишайниковой пустоши элементами минерального питания показали, что при внесении кальция и снижении кислотности почвы не изменяются ее азотный режим и закономерности азотного питания растений. Повышение доступности фосфора способствует мобилизации азота органических соединений почвы и изменению роли микоризы в азотном питании растений, что приводит к формированию у них более тяжелого изотопного состава азота. У азотфиксирующего вида бобовых (<i>Oxytropis kubanensis</i>) при этом снижается интенсивность азотфиксации. Повышение доступности азота приводит к его активному поглощению всеми изученными видами растений, за исключением <i>Oxytropis kubanensis</i> , и "утяжелению" изотопного состава азота растений. Однако изменение азотного статуса у разных видов растений выражено в разной степени.	Да (если в тексте публикации указано название ЦКП или УНУ)	84

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45.	Статья в научном журнале	ВЛИЯНИЕ ОСОБЕННОСТЕЙ СОДЕРЖАНИЯ И ПИТАНИЯ НА МОРФОЛОГИЮ ФУНКЦИОНАЛЬНЫХ СТРУКТУР СЛИЗИСТОЙ ОБОЛОЧКИ ПОЛОСТИ РТА И СИМБИОЦЕНОЗЫ BOS TAURUS TAURUS	10.17513/srbs.1179	Хацаева Р.М.	Научное обозрение. Биологические науки, 1, 2020	2500-3399	Ринц	Впервые с помощью методов сканирующей электронной микроскопии были выявлены морфологические особенности эпителиальной поверхности слизистой оболочки уголков рта и симбиоценозов слизистой оболочки полости рта взрослых особей бычков <i>Bos taurus taurus</i> , связанные со спецификой их содержания и питания. Исследовались морфофункциональные структуры и симбиоценозы слизистых оболочек уголков рта двух групп взрослых особей бычков <i>Bos taurus taurus</i> с разными условиями содержания и питания - пастбищным при естественной пастбе и домашним с кормлением горячей бардой. Выявлены значительные деструктивные изменения морфологии функциональных структур слизистой оболочки ротовой полости и ультраструктуры поверхности слизистой оболочки, а также угнетенное состояние симбиоценозов в слизистой оболочке уголков рта у группы бычков при кормлении горячей бардой, позволяющие утверждать, что такой способ кормления нерационален и может привести к серьезным последствиям для здоровья животных. Обнаруженные ультраструктурные особенности слизистой оболочки уголков рта и их симбионтов в связи со спецификой содержания и питания сравниваемых животных показывают ограниченность адаптивных возможностей органов пищеварительной системы к экстремальным изменениям рациона. Полученные данные могут быть использованы в практике разведения и кормления домашних видов жвачных животных при стойловом содержании и особенно при кормлении диких видов при содержании в зоопарках, питомниках и охраняемых территориях с целью сохранения биоразнообразия.	Да (если в тексте публикации указано название ЦКП или УНУ)	25
46.	Статья в научном журнале	ВОЙЛОК ИЗ КОЛЛЕКТИВНОГО ЗАХОРОНЕНИЯ (СООРУЖЕНИЯ № 110) В Г. ЯРОСЛАВЛЕ	http://doi.org/10.25681/IARAS.0130-2620.260.305-325	Энговатова А.В., Чернова О.Ф., Орфинская О.В., Яковчик М.С.	Краткие сообщения Института археологии, 260, 2020	0130-2620	ВАК, Ринц	В статье приведены результаты исследования войлока, обнаруженного в коллективном санитарном захоронении жителей Ярославля, убитых при разорении города армией Бату-хана в 1238 г. По итогам анализа были идентифицированы несколько типов войлочных изделий и выявлены их структурно-технологические характеристики. Определение видовой принадлежности животных, из шерсти которых был свалян войлок, позволило расширить представление о сырьевой базе и текстильных технологиях домонгольской Древней Руси.	Да (если в тексте публикации указано название ЦКП или УНУ)	309

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47.	Статья в научном журнале	Злаковые мухи рода <i>Meromyza</i> (Diptera, Chloropidae) и злаки (Poaceae): эволюция пищевых приоритетов	https://doi.org/10.17816/ecogen42539	Сафонкин А.Ф., Горюнова С.В., Горюнов Д.В., Триселева Т.А.	Экологическая генетика (ecological genetics), 18 (4), 2020	18110932	ВАК; Ринц; Scopus	По литературным и собственным данным показано, что злаковые мухи <i>Meromyza</i> развиваются на злаках из 5 триб: Pooeae, Triticeae, Bromaeae, Nardeae, Arundinarieae. Проанализирована пищевая специализация 25, в основном западно-палеарктических видов, меромиз: 11 видов развиваются на злаках трибы Pooeae, 4 - Triticeae, 9 - на злаках из разных триб, 1 вид на бамбуке. Филогенетическое дерево по участку гена CO1 мтДНК построено в программе BEAST для 28 видов меромиз, из которых для 19 видов известны кормовые злаки, <i>Campiglossa rugtaea</i> и 8 видов дрозифил. Приведен обзор по эволюции злаков. Ко времени возникновения рода <i>Meromyza</i> (не ранее середины миоцена), определенному в сравнении с известной шкалой эволюции дрозифил, уже произошло обособление злаков Pooideae и их дифференциация на трибы. Для видов, близких к предковым гаплотипам (<i>M. nigriseta</i> , <i>M. pratorum</i> , <i>M. saltatrix</i> , <i>M. variegata</i>) или представляющих самостоятельные ветви в своих кластерах (<i>M. acuminata</i> , <i>M. mosquensis</i> , <i>M. nigriventris</i>), предположено наличие признаков неспециализированного фитофага-олигофага (кроме <i>M. acuminata</i>), подтвержденное широким спектром кормовых злаков. Последующая дифференциация рода с преобладанием узких олигофагов или монофагов связана с увеличением обилия [core pooids] (Triticodae + Poodeae) злаков и распространением травяных биомов в миоцене. Олигофаги <i>M. nigriventris</i> , <i>M. nigriseta</i> , <i>M. variegata</i> и монофаги <i>M. acuminata</i> и <i>M. grandifemoris</i> повреждают культурные злаки.	Да (если в тексте публикации указано название ЦКП или УНУ)	435

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48.	Статья в научном журнале	ИЗМЕНЧИВОСТЬ ФРАГМЕНТОВ ЭКЗОНА 11 ЯДЕРНОГО ГЕНА Brcal И МИТОХОНДРИАЛЬНОГО ГЕНА Cox1 У ДОМОВЫХ МЫШЕЙ <i>Mus musculus</i>	10.31857/S0026898420020020	Богданов А.С., Мальцев А.Н., Котенкова Е.В., Маликов В.Г., и др.	МОЛЕКУЛЯРНАЯ БИОЛОГИЯ (Molecular Biology), 54 (2), 2020	0026-8933	ВАК; Ринц; Web of Science; Scopus	С целью уточнения генетических различий между подвидами <i>Mus musculus</i> , их распространения и гибридизации впервые проведен сравнительный анализ изменчивости нуклеотидных последовательностей фрагментов экзона 11 ядерного гена <i>Brcal</i> (2331 п.н.) и митохондриального гена <i>Cox1</i> (1260 п.н.) у 40 домашних мышей из Западной и Восточной Европы, Закавказья, Сибири, Средней и Южной Азии. Генотипы гена <i>Brcal</i> разделились на пять основных групп, отличающихся друг от друга целым рядом фиксированных замен. Прослеживается отчетливая приуроченность генотипов каждой из этих групп к определенным географическим регионам и их специфичность для подвидов <i>M. m. musculus</i> , <i>M. m. domesticus</i> , <i>M. m. castaneus</i> и <i>M. m. wagneri</i> вместе с <i>M. m. gansuensis</i> ; пятая группа соответствует неидентифицированному подвиду или отдельной генетической форме из индийского штата Сикким. Помимо гомозиготных экземпляров обнаружены также особи, гетерозиготные одновременно по всем диагностическим локусам и определенные нами как гибридные. Они выявлены в основном в зонах контактов подвидов, но в нескольких случаях - на большом расстоянии от них, вероятно всего, вследствие завоза с транспортом. У двух гибридных мышей - из провинции Бахтиярия (Иран), и из Забайкальского края (Россия) - выявлены уникальные гаплотипы <i>Brcal</i> . Не исключено, что они могут быть хотя бы отчасти свойственны подвидам <i>M. m. bactrianus</i> и <i>M. m. gansuensis</i> соответственно. Таким образом, наши результаты указывают на ядерный ген <i>Brcal</i> как на весьма перспективный молекулярно-генетический маркер для изучения изменчивости, дифференциации и гибридизации домашних мышей, а также для подвидовой идентификации особей <i>M. musculus</i> . Ген <i>Cox1</i> , эволюционирующий быстрее гена <i>Brcal</i> , мало пригоден для дискриминации особей <i>M. m. musculus</i> , <i>M. m. wagneri</i> , <i>M. m. gansuensis</i> и закавказских представителей <i>M. m. domesticus</i> вследствие интрогрессии и длительного сохранения в популяциях чужеродной митохондриальной ДНК. Однако анализ гена <i>Cox1</i> (наряду с диагностикой по ядерной ДНК) может быть полезным при оценке популяционных различий в пределах подвидов <i>M. m. castaneus</i> и <i>M. m. domesticus</i> .	Нет	0

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1	2	3	4	5	6	7	8	9	10	11
49.	Статья в научном журнале	ИЗОТОПНЫЙ СОСТАВ УГЛЕРОДА ГУМУСОВЫХ КИСЛОТ ДЕРНОВО-ПОДЗОЛИСТЫХ ПОЧВ И ЧЕРНОЗЕМОВ	10.31857/S0032180X20040097	Макаров М.И., Малышева Т.И., Гончаров А.А., Тиунов А.В.	Почвоведение, 4, 2020	1064-2293	BAK; Ринц; Web of Science; Scopus	Результаты изотопного анализа углерода органического вещества почв часто используются в палеоэкологических исследованиях для реконструкции климата и состава фитоценоза (типа фотосинтеза). Сложность интерпретации изотопных данных состоит в том, что соотношение изотопов ¹³ C/ ¹² C в растениях и почвах контролируется комплексом факторов, включающих как условия окружающей среды, так и особенности состава органического вещества почв. На примере дерново-подзолистых почв (Albic Retisols) и черноземов выщелоченных (Luvic Chernozems) показано, что экстрагируемые гумусовые кислоты обогащены тяжелым изотопом ¹³ C относительно общего органического вещества почв. В дерново-подзолистых почвах повышенные значения ^{δ13} C характерны для гуминовых кислот глубже гумусового горизонта и для фульвокислот во всем профиле, а в черноземах более "тяжелым" является только углерод фульвокислот. Таким образом, изменение изотопного состава углерода в почвах, в частности его "утяжеление" с глубиной, может быть связано с миграцией лабильных органических соединений по профилю и их аккумуляцией в более глубоких горизонтах.	Да (если в тексте публикации указано название ЦКП или УНУ)	418
50.	Статья в научном журнале	ИССЛЕДОВАНИЯ СТОЛКНОВЕНИЙ ВОЗДУШНЫХ СУДОВ С ПТИЦАМИ ПО ДАННЫМ ЭКСПЕРТИЗ 2002-2019 гг.	10.31857/S0002332920060120	Силаева О.Л., Холодова М.В., Свиридова Т.В., Букреев С.А., Вараксин А.Н.	Известия РАН. Серия биологическая (Biology Bulletin), 6, 2020	0002-3329	BAK; Ринц; Web of Science; Scopus	Представлены результаты идентификации видов птиц, ставших виновниками столкновений преимущественно с воздушными судами Публичного акционерного общества "Аэрофлот". Отмечено, что идентификационная экспертиза как комплексное исследование включает в себя анализ ДНК, а также макро- и микроструктуры группы перьев, одиночного пера или его фрагмента. Установлено место столкновения воздушного судна с птицей. Рассмотрены причины и факторы, которые привели к появлению особи того или иного вида на аэродроме, даны краткие рекомендации по минимизации столкновений самолетов с птицами на данном аэродроме. За указанный период выявлены 32 вида птиц 10 отрядов, виновных в столкновениях с воздушными судами. Обнаружено, что большинство столкновений происходит с Ржанкообразными (в основном, с чайками), Соколообразными и Стрижеобразными. Отмечено, что >90% столкновений происходит на территории аэропорта или вблизи от него; при взлете в 1.5 раза больше, чем при посадке; наибольшее число столкновений приходится на весенне-летнее время и на светлое время суток; от столкновений с птицами страдают преимущественно двигатель, носовая часть и фюзеляж.	Да (если в тексте публикации указано название ЦКП или УНУ)	9

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1	2	3	4	5	6	7	8	9	10	11
51.	Статья в научном журнале	КОВШОВЫЕ ГУБЫ БАРЕНЦЕВА МОРЯ КАК МОДЕЛЬНЫЕ ОБЪЕКТЫ ИЗУЧЕНИЯ ДИНАМИКИ ПРИБРЕЖНЫХ СООБЩЕСТВ С ЧУЖЕРОДНЫМ КАМЧАТСКИМ КРАБОМ (PARALITHODES SAMTSCHEVICUS, DECAPODA, LITHODIDAE)	10.31857/S0044513420070107	Спиридонов В.А., Залота А.К., Переладов М.В., Деарт Ю.В., Тиунов А.В.	Зоологический журнал, 99 (7), 2020	0044-5134	ВАК; Ринц; Web of Science; Scopus	Донные сообщества частично изолированных ковшовых губ (лагун) кута губы Амбарной (Линьялампи и Сисяярви) отражают влияние ограничения водообмена и волнения в сочетании с другими абиотическими и биотическими факторами. Среди последних особенно важную роль может играть присутствие многочисленной группировки камчатского краба (<i>Paralithodes camtschaticus</i>), акклиматизированного в южной части Баренцева моря во второй половине 20-го века. Медианная плотность молоди и взрослых крабов в лагунах (42.5-52 экз./1000 м ² в большинстве лет наблюдений) сопоставима с плотностью в соседних открытых частях Варангер-фьорда. Узкий и мелководный пролив, связывающий лагуны с морем, может ограничивать перемещение крабов между ними. Таким образом, взрослые крабы присутствуют в лагунах и в те сезоны, когда в своих обычных местообитаниях они мигрируют от берега на большие глубины. Охарактеризованы пищевые цепи, ведущие от фитопланктона и макрофитов к донным хищникам - камчатскому крабу, крабу-пауку (<i>Hyas araneus</i>) и раку-отшельнику (<i>Pagurus pubescens</i>). Трофический уровень взрослых камчатских крабов в лагунах (2.88) ниже уровня, на котором находятся крабы-пауки (3.16-3.42) и камчатские крабы в открытой части прибрежной зоны (3.44). Это указывает на различия характера питания крабов в лагунах и в открытых прибрежных водах. В трофической сети лагун не выражена характерная для прибрежной зоны Баренцева моря пищевая цепь "ламинариевые водоросли-морские ежи-камчатские крабы". Низкая численность и особенности распределения морских ежей в лагунах могут быть обусловлены выеданием их камчатскими крабами в течение длительного времени. Хотя ковшовые губы Линьялампи и Сисяярви являются полноценными морскими водоемами, они в ряде характеристик сходны с настоящими озерами. Так же как озера они являются удобными моделями для изучения долговременной динамики сообществ и экосистем.	Да (если в тексте публикации указано название ЦКП или УНУ)	807

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1	2	3	4	5	6	7	8	9	10	11
52.	Статья в научном журнале	ОБНАРУЖЕНИЕ НОВОГО ВИДА КИТООБРАЗНЫХ РОДА BERARDIUS В РОССИЙСКИХ ВОДАХ	10.31857/S0134347520030055	Федутин И.Д., Мещерский И.Г., Филатова О.А., Титова О.В., и др.	Биология моря (Russian Journal of Marine Biology), 46 (3), 2020	1063-0740	BAK; Ринц; Web of Science; Scopus	До недавнего времени считали, что в северной части Тихого океана обитает единственный представитель китообразных рода Berardius – северный плавун Berardius bairdii Stejneger, 1883. Однако результаты генетического анализа образцов тканей и морфометрические данные свидетельствуют о существовании здесь не описанного ранее вида рода Berardius, симпатричного с северным плавунем, так называемого малого плавуна. В настоящем исследовании установлен факт высокой вероятности обитания малого плавуна в российских водах и описан его возможный ареал. Проведен генетический анализ контрольного региона митохондриальной ДНК 28 новых образцов рода Berardius из четырех районов Дальнего Востока. Образцы с Командорских островов и из Камчатского залива были отнесены к филогруппе северного плавуна. Среди мертвых животных, найденных на побережье о-ва Кунашир, обнаружено по одной особи северного и малого плавуна. Еще две особи малого плавуна были найдены на восточном побережье о-ва Сахалин. Это первые подтвержденные генетическим анализом находки нового вида рода Berardius на российской территории.	Да (если в тексте публикации указано название ЦКП или УНУ)	183
53.	Статья в научном журнале	ПОЧВЫ И АЗОТНОЕ ПИТАНИЕ РАСТЕНИЙ АЛЬПИЙСКИХ ЭКОСИСТЕМ СЕВЕРО-ЗАПАДНОГО КАВКАЗА ПРИ МНОГОЛЕТНЕМ ПОВЫШЕНИИ ДОСТУПНОСТИ БИОФИЛЬНЫХ ЭЛЕМЕНТОВ	10.31857/S0032180X20080110	Макаров М.И., Онипченко В.Г., Тиунов А.В., Малышева Т.И., Кадулин М.С.	Почвоведение, 8, 2020	1064-2293	BAK; Ринц; Web of Science; Scopus	В эксперименте с обогащением кислых, богатых органическим веществом горно-луговых почв (Umbric Leptosols) альпийских экосистем элементами минерального питания показано, что содержание в них углерода органического вещества и общего азота, а также лабильных органических соединений отличается устойчивостью к длительному (20 лет) внесению минеральных удобрений. Характерны только выраженные прямые эффекты: повышение концентраций неорганических соединений азота и фосфора при внесении азотных и фосфорных удобрений, а также повышение pH при известковании. Растения являются более чувствительными индикаторами изменения условий азотного питания. Для них характерно активное поглощение дополнительного количества азота и “утяжеление” его изотопного состава при повышении доступности элемента. При этом степень проявления этих эффектов зависит от исходной обеспеченности почв и растений азотом. Помимо таких прямых воздействий, изменение азотного статуса растений отражает также изменения в трансформации азотсодержащих соединений в почве и в азотном питании растений, происходящие при повышении доступности фосфора и снижении кислотности в наиболее бедных фосфором и наиболее кислых условиях соответственно. Эти воздействия приводят к мобилизации азота органических соединений почвы и, вероятно, к уменьшению роли микоризы в азотном питании растений. В результате у растений формируется более тяжелый изотопный состав азота.	Да (если в тексте публикации указано название ЦКП или УНУ)	1017

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1	2	3	4	5	6	7	8	9	10	11
54.	Монография	Популяционная биология куньих (лесная куница, лесной хорь, американская норка, европейская норка).		Кораблев М.П., Кораблев Н.П., Кораблев П.Н.	М.: Товарищество научных изданий КМК, 0, 2020	978-5-907213-87-6	ВАК; Ринц	Монография посвящена изучению популяций четырех видов куньих: лесной куницы <i>Martes martes</i> , лесного хоря <i>Mustela putorius</i> , американской норки <i>Neovison vison</i> , европейской норки <i>Mustela lutreola</i> , экологические ниши которых в значительной степени перекрываются. Новизна исследований заключается в комплексном подходе к изучению внутривидовой структуры и межвидовых отношений с использованием классических морфологических, эпигенетических и молекулярно-генетических методов. На основе разностороннего анализа краниологических коллекций и молекулярно-генетических материалов представлены новые данные о внутривидовой изменчивости и структуре популяций изучаемых видов. Результаты собственных многолетних исследований, в том числе, по другим видам, и привлечение обширных литературных данных позволили авторам включиться в обсуждение вопросов соответствия темпов микроэволюции и адаптационного факторов, способствующих формированию морфологического и молекулярно-генетического полиморфизма.	Да (если в тексте публикации указано название ЦКП или УНУ)	5
55.	Статья в научном журнале	РАССЕЛЕНИЕ МОЛОДНЯКА ОБЫКНОВЕННОЙ БУРОЗУБКИ (SOREX ARANEUS) ОТ НАТАЛЬНЫХ УЧАСТКОВ	10.31857/S0044513420060124	Олейниченко В.Ю., Распопова А.А., Мещерский И.Г., Купцов А.В. , и др.	Зоологический журнал, 99 (6), 2020	0044-5134	ВАК; Ринц; Web of Science; Scopus	В природе на юге Тверской обл. изучена постнатальная дисперсия молодняка обыкновенной бурозубки (<i>Sorex araneus</i>). На площади около 22 га проведено тотальное индивидуальное мечение землероек. Места рождения сеголеток определены по участкам родственных перезимовавших самок. Животные генотипированы по 10 микросателлитным локусам: L62, L68, L45, C117, L69, C5, B30, D106, D103, D138. Семейный анализ проведен в программе Cervus 3.07. В 2013 г. (плотность населения в октябре 6.5 особи/га), для 229 сеголеток и 20 самок выявлено 33 диады мать-детеныш. Доля сеголеток, родившихся в пределах наблюдаемой площади, 14.8%. Основу населения составили зверьки, пришедшие из-за границ площадки. В 2014 г. (плотность в октябре 2.6 особи/га) для 58 сеголеток и 9 взрослых самок установлены 9 диад мать-детеныш. Доля зверьков, рожденных на площадке, 15.5%. В пределах площадки дистанции расселения от нательных участков варьировали в 2013 г. от 0 до 610 м, Me = 224, а в 2014 г. - от 45 до 410 м, Me = 297. Полученные данные не позволяют говорить о значимых различиях в разные годы. С учетом поправок на долю контролируемой территории можно предполагать, что значительная часть молодых зверьков расселялась на дистанции более 400 м как при относительно высокой осенней плотности населения, так и при ее снижении на следующий год.	Да (если в тексте публикации указано название ЦКП или УНУ)	687

№ п/п	Вид публикации	Наименование публикации	DOI публикации	Автор(ы)	Издание, номер, год	ISSN / ISBN издания	Индексация издания	Краткое описание научных результатов, полученных на оборудовании ЦКП	Наличие в публикации ссылки на ЦКП	Страница, содержащая ссылку на ЦКП
1	2	3	4	5	6	7	8	9	10	11
56.	Статья в научном журнале	ТРОФИЧЕСКАЯ СТРУКТУРА МЕЛКИХ БЕСПОЗВОНОЧНЫХ, НАСЕЛЯЮЩИХ ПОДСТИЛКУ МУССОННОГО ТРОПИЧЕСКОГО ЛЕСА	10.31857/S036705972005011X	Семенина Е.Э., Розанова О.Л., Нгуен Ван Тхинь, Тиунов А.В.	Экология (Russian Journal of Ecology), 5, 2020	1067-4136	ВАК; Ринц; Web of Science; Scopus	Оценена связь между размером тела беспозвоночных животных, обитающих в подстилке тропического муссонного леса, и их трофической позицией. Установлено, что в комплексе мелких подвижных артропод, населяющих эфемерную подстилку тропического леса, увеличение индивидуального размера особей хищников и сапрофагов ассоциировано с повышением трофического уровня (в том числе микробного) и интеграцией разных потоков вещества и энергии.	Да (если в тексте публикации указано название ЦКП или УНУ)	393
57.	Публикация в материалах конференции (съезда, симпозиума)	Электронномикроскопическая характеристика симбионтов камер желудка <i>Bos taurus taurus</i>	10.37795/RCEM.2020.59.59.074	Хацаева Р.М.	XXVIII Российская конференция по электронной микроскопии VI школа молодых учёных, 0, 2020	978-5-6045073-2-2	Ринц	Впервые с помощью методов сканирующей электронной микроскопии удалось показать видовое, морфологическое разнообразие и особенности локализации симбионтов камер желудка <i>Bos taurus taurus</i> [1, 2]. В качестве объектов настоящих исследований были выбраны камеры желудка взрослых <i>Bos taurus taurus</i> : рубец, сетка, книжка и сычуг.	Да (если в тексте публикации указано название ЦКП или УНУ)	173

Руководитель ЦКП

_____ (Коробушкин Д.И.)