



Universiteit  
Leiden  
The Netherlands

## Towards effective conservation and governance of Pontocaspian biodiversity in the Black Sea region

Gogaladze, A.

### Citation

Gogaladze, A. (2021, November 30). *Towards effective conservation and governance of Pontocaspian biodiversity in the Black Sea region*. Retrieved from <https://hdl.handle.net/1887/3245837>

Version: Publisher's Version

[Licence agreement concerning inclusion of doctoral  
thesis in the Institutional Repository of the University  
of Leiden](#)

License: <https://hdl.handle.net/1887/3245837>

**Note:** To cite this publication please use the final published version (if applicable).

---

## REFERENCES

---

- Abrahamson, E., Rosenkopf, L., 1997. Social network effects on the extent of innovation diffusion: A computer simulation. *Organization science* 8, 289-309.
- Adger, W.N., Brown, K., Tompkins, E.L., 2005. The political economy of cross-scale networks in resource co-management. *Ecology and Society* 10.
- Akimov, I.A., 2009. Red Data Book of Ukraine. Animal World. Globalconsulting, Kiev, Ukraine. [in Ukrainian].
- Alexandrov, B., Boltachev, A., Kharchenko, T., Lyashenko, A., Son, M., Tsarenko, P., Zhukinsky, V., 2007. Trends of aquatic alien species invasions in Ukraine. *Aquatic Invasions* 2, 215-242.
- Alexenko, T.L., 2004. Mollusks of the Dnieper-Bug Estuary Region and Their Role in Feeding of Fish. *Hydrobiological Journal* 40, 56-62.
- Alexenko, T.L., Kucheryava, A.N., 2019. Osoblyvosti rozseleniya moluskiv roda *Caspia* (Gastropoda, Pectinibranchia, Pyrgulidae) u Dniprovsко-Buzkiy gyrlovyh oblasti (Specificity of distribution of molluscs of the genus *Caspia* (Gastropoda, Pectinibranchia, Pyrgulidae) in the Dnieper-Bug estuary area). *Naukovi chytannya, prysvyachenі Dnyu nauky. Ecologichni dislidzhennya Dniprovsко-Buzkogo rehionu* 12, 28-33. [in Ukrainian].
- Alexenko, T.L., Shevchenko, I.V., 2016. Strukturno-funkcionalni osoblyvosti formuvannya ugrupovan donnykh bezkhrebetnykh rusla Nyzhnoho Dnipra v suchasnykh umovakh (Structural-functional characteristics of formation of communities of the bottom invertebrates of the Lower Dnieper riverbed in modern conditions). *Naukovi chytannya, prysvyachenі Dnyu nauky. Ecologichni dislidzhennya Dniprovsко-Buzkogo rehionu* 9, 45-50. [in Ukrainian].
- Alexenko, T.L., Starobogatov, Y.I., 1987. Vidy *Caspia* i *Turricaspia* (Gastropoda, Pectinibranchia, Pyrgulidae) Azovo-Chernomorskogo basseyna (Species of *Caspia* and *Turricaspia* (Gastropoda, Pectinibranchia, Pyrgulidae) of the Azov-Black Sea basin). *Vestnik zoologii* 21, 32-38. [in Ukrainian].
- Aliyeva, G., Halsall, C., Alasgarova, K., Avazova, M., Ibrahimov, Y., Aghayeva, R., 2013. The legacy of persistent organic pollutants in Azerbaijan: an assessment of past use and current contamination. *Environmental Science and Pollution Research* 20, 1993-2008.
- Amano, T., Sutherland, W.J., 2013. Four barriers to the global understanding of biodiversity conservation: wealth, language, geographical location and security. *Proceedings of the Royal Society B: Biological Sciences* 280, 20122649.
- Andrussov, N., 1897. Fossil and living Dreissensidae of Eurasia. *Trudy Sankt-Peterburgskogo obschestva estestvoispytatelej. Otdel geologii i mineralogii* 25, 1-683. [in Russian].

- Angelov, A., 2000. Mollusca (Gastropoda et Bivalvia) aquae dulcis, catalogus Faunae Bulgaicae. Pensoft & Backhuys Publ., Sofia, Leiden 54.
- Anistratenko, O.Y., Starobogatov, Y.I., Anistratenko, V.V., 1999. Mollusks of the genus *Theodoxus* (Gastropoda, Pectinibranchia, Neritidae) from the Black and the Azov seas basin. *Vestnik zoologii* 33, 11-19.
- Anistratenko, V.V., 1996. Bryukhonogiye mollyuski Chernomorskogo biosfernogo zapovednika (Gastropod Mollusks of the Black Sea Biosphere Nature Reserve). *Vestnik zoologii* 1/2, 9-15.
- Anistratenko, V.V., 2007a. Finding of the extremely rare hydrobiid *Caspia logvinenkoi* (Mollusca: Gastropoda) in the estuary of the River Don and its zoogeographical significance. *Mollusca* 25, 23-26.
- Anistratenko, V.V., 2007b. New data on the composition, structure, and genesis of the Ponto-Caspian Gastropod fauna in the Azov-Black Sea basin. *Zoological Journal* 86, 793-801.
- Anistratenko, V.V., 2008. Evolutionary trends and relationships in hydrobiids (Mollusca, Caenogastropoda) of the Azov-Black Sea Basin in the light of their comparative morphology and paleozoogeography. *Zoosystematics and Evolution* 84, 129-142.
- Anistratenko, V.V., 2009. *Turricaspia lincta* Milashevitch, 1908, In Red Data Book of Ukraine. Animal World. ed. I.A. Akimov, p. 290. Globalconsulting, Kiev, Ukraine.
- Anistratenko, V.V., 2013. On the taxonomic status of the highly endangered Ponto-Caspian gastropod genus *Caspia* (Gastropoda: Hydrobiidae: Caspiinae). *Journal of Natural History* 47, 51-64.
- Anistratenko, V.V., Anistratenko, O.Y., 2018. New finds of "Red Data Book" molluscs of the Ponto-Caspian biogeographic complex. Materials to the Fourths Edition of the Red Data Book of Ukraine, Animal World, pp. 19-20, Kiev, Ukraine.
- Anistratenko, V.V., Anistratenko, O.Y., Khaliman, I.A., 2014. Conchological variability of *Anadara inaequivalvis* (Bivalvia, Arcidae) in the Black-Azov sea basin. *Vestnik zoologii* 48, 457-466.
- Anistratenko, V.V., Khaliman, I.A., 2006. Bivalve Mollusc *Anadara inaequivalvis* (Bivalvia, Arcidae) in the Northern Part of the Sea of Azov: Completion of Colonization of the Azov-Black Sea Basin. *Vestnik zoologii* 40, 505-511.
- Anistratenko, V.V., Khaliman, I.A., Anistratenko, O.Y., 2011. The Molluscs of the Sea of Azov. Kyiv: Naukova dumka, 1-173. [in Russian].
- Anistratenko, V.V., Sitnikova, T.Y., Kijashko, P.V., Vinarski, M.V., Anistratenko, O.Y., 2020. A review of species of the genus *Theodoxus* (Gastropoda: Neritidae) of the Ponto-Caspian region, with considerations on available type materials. *Ruthenica* 30, 115-134.
- Anistratenko, V.V., Zettler, M.L., Anistratenko, O.Y., 2017. On the taxonomic relationship between *Theodoxus pallasi* and *T. astrachanicus* (Gastropoda: Neritidae) from the Ponto-Caspian region. *Archiv für Molluskenkunde International Journal of Malacology* 146, 213-226.
- Audzijonyte, A., Baltrūnaitė, L., Väinölä, R., Arbačiuskas, K., 2017. Human-mediated lineage admixture in an expanding Ponto-Caspian crustacean species *Paramysis lacustris* created a novel genetic stock that now occupies European waters. *Biological Invasions* 19, 2443-2457.
- Audzijonyte, A., Daneliya, M.E., Mugue, N., Väinölä, R., 2008. Phylogeny of *Paramysis* (Crustacea: Mysida) and the origin of Ponto-Caspian endemic diversity: resolving power from nuclear protein-coding genes. *Molecular phylogenetics and evolution* 46, 738-759.

- Audzijonyte, A., Daneliya, M.E., Väinölä, R., 2006. Comparative phylogeography of Ponto-Caspian mysid crustaceans: isolation and exchange among dynamic inland sea basins. *Molecular Ecology* 15, 2969-2984.
- Azam, C.S., Gigot, G., Witte, I., Schatz, B., 2016. National and subnational Red Lists in European and Mediterranean countries: current state and use for conservation. *Endangered Species Research* 30, 255-266.
- Baboiaru, G., 2016. Danube Delta: The Transboundary Wetlands (Romania and Ukraine). The Wetland Book: II: Distribution, Description and Conservation, 1-12.
- Balashov, I.A., Son, M.O., Coadă, V., Welter-Schultes, F., 2013. An updated annotated checklist of the molluscs of the Republic of Moldova. *Folia Malacologica* 21, 175-181.
- Ban, N.C., Mills, M., Tam, J., Hicks, C.C., Klain, S., Stoeckl, N., Bottrill, M.C., Levine, J., Pressey, R.L., Satterfield, T., 2013. A social-ecological approach to conservation planning: embedding social considerations. *Frontiers in Ecology and the Environment* 11, 194-202.
- Barnes, M.L., Lynham, J., Kalberg, K., Leung, P., 2016. Social networks and environmental outcomes. *Proceedings of the National Academy of Sciences* 113, 6466-6471.
- Barnes, R., 1989. What, if anything, is a brackish-water fauna? *Earth and Environmental Science Transactions of The Royal Society of Edinburgh* 80, 235-240.
- Barnosky, A.D., Matzke, N., Tomiya, S., Wogan, G.O., Swartz, B., Quental, T.B., Marshall, C., McGuire, J.L., Lindsey, E.L., Maguire, K.C., 2011. Has the Earth's sixth mass extinction already arrived? *Nature* 471, 51-57.
- Barrat, A., Barthélémy, M., Vespignani, A., 2004. Weighted evolving networks: coupling topology and weight dynamics. *Physical review letters* 92, 228701.
- Benson, A., Boydston, C., 1995. Invasion of the zebra mussel into the United States. *Our Living Resources: A Report to the Nation on the Distribution, Abundance, and Health of US Plants, Animals and Ecosystems*, US Department of the Interior, National Biological Service, Washington, DC, 445-446.
- Bespalyaya, Y.V., Bolotov, I.N., Aksanova, O.V., Kondakov, A.V., Gofarov, M.Y., Laenko, T.M., Sokolova, S.E., Shevchenko, A.R., Travina, O.V., 2018. Aliens are moving to the Arctic frontiers: an integrative approach reveals selective expansion of androgenic hybrid *Corbicula* lineages towards the North of Russia. *Biological Invasions* 20, 2227-2243.
- Bespalov, A., 2005. Landscape zoning of the Sea of Azov using elements of GIS technology, PhD thesis, Rostov State University, In Retrieved from: <http://earthpapers.net/> [in Russian].
- Bick, A., Bastrop, R., Kotta, J., MEIßNER, K., Meyer, M., Syomin, V., 2018. Description of a new species of Sabellidae (Polychaeta, Annelida) from fresh and brackish waters in Europe, with some remarks on the branchial crown of Laonome. *Zootaxa* 4483, 349-364.
- Bij de Vaate, A., Jazdzewski, K., Ketelaars, H.A.M., Gollasch, S., Van der Velde, G., 2002. Geographical patterns in range extension of Ponto-Caspian macroinvertebrate species in Europe. *Canadian Journal of Fisheries and Aquatic Sciences* 59, 1159-1174.
- Binning, C., Young, M., Cripps, E., 1999. Beyond Roads, Rates and Rubbish: Opportunities for local government to conserve native vegetation.
- Birstein, V.J., Waldman, J.R., Bemis, W.E., 2006. Sturgeon biodiversity and conservation. Springer Science & Business Media.
- Bláha, M., Uzhytchak, M., Bondarenko, V., Polícar, T., 2017. The least known European native crayfish *Astacus pachypus* (Rathke, 1837) revealed its phylogenetic position. *Zoologischer Anzeiger* 267, 151-154.

## REFERENCES

- Bloesch, J., Jones, T., Reinartz, R., Striebel, B., 2006. An action plan for the conservation of sturgeons (Acipenseridae) in the Danube River Basin. *Österreichische Wasser-und Abfallwirtschaft* 58, 81-88.
- Bodin, Ö., Crona, B., Ernstson, H., 2006. Social networks in natural resource management: what is there to learn from a structural perspective? *Ecology and Society* 11.
- Bodin, Ö., Crona, B.I., 2009. The role of social networks in natural resource governance: What relational patterns make a difference? *Global Environmental Change* 19, 366-374.
- Bodin, Ö., Prell, C., 2011. Social networks and natural resource management: uncovering the social fabric of environmental governance. Cambridge University Press.
- Boeters, H.D., Gloer, P., Georgiev, D., Dedov, I., 2015. A new species of *Caspia* Clessin et W. Dybowski, 1887 (Gastropoda: Truncatelloidea: Hydrobiidae) in the Danube of Bulgaria. *Folia Malacologica* 23, 177-186.
- Bogdan, R., Taylor, S.J., 1975. Introduction to Qualitative Research Methods. John Wiley & Sons, New York.
- Bogutskaya, N.G., Kijashko, P.V., Naseka, A.M., Orlova, M.I., 2013. Identification keys for fish and invertebrates. Volume 1: Fish and molluscs. KMK Scientific Publishers, Moscow. [in Russian].
- Borcea, I., 1926a. Faune survivante de type caspien dans le liman d'eau douce de Roumanie. Note preliminaire. *Ann Sc Univ Iassy* 13, 207-232.
- Borcea, I., 1926b. Quelques remarques sur les Adacnides et principalement sur les Adacnides des Lacs Razelm. *Ann Sc Univ Iassy* 13, 449-485.
- Börzel, T., 2009. Coping with accession to the European Union: new modes of environmental governance. Springer.
- Bradley, E.H., Curry, L.A., Devers, K.J., 2007. Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health services research* 42, 1758-1772.
- Brandes, U., 2001. A faster algorithm for betweenness centrality. *Journal of mathematical sociology* 25, 163-177.
- Brechin, S.R., Wilshusen, P.R., Fortwangler, C.L., West, P.C., 2002. Beyond the square wheel: toward a more comprehensive understanding of biodiversity conservation as social and political process. *Society & Natural Resources* 15, 41-64.
- Briggs, B.S.V., 2001. Linking ecological scales and institutional frameworks for landscape rehabilitation. *Ecological Management & Restoration* 2, 28-35.
- Bulysheva, N.I., Glushchenko, G.Y., Kreneva, K.V., Kleschenkov, A.V., Varchenko, E.A., 2019. Settling of the fouling organisms at the metals in the delta of the Don River and in the estuarine zone of the Sea of Azov in winter. International Multidisciplinary Scientific GeoConference: SGEM 19, 521-526.
- Burada, A., Țopă, C.M., Georgescu, L.P., Teodorof, L., Năstase, C., Seceleanu-Odor, D., Negrea, B.M., Iticescu, C., 2014. Heavy metals accumulation in plankton and water of four aquatic complexes from Danube Delta area. *Aquaculture, Aquarium, Conservation & Legislation* 7, 301-310.
- Burt, R.S., 1992. Structural Holes: The Social Structure of Competition. Harvard University Press, Cambridge, MA.
- Burt, R.S., 2002. The social capital of structural holes. The new economic sociology: Developments in an emerging field 148, 190.
- Burt, R.S., 2004. Structural holes and good ideas. *American journal of sociology* 110, 349-399.
- Buzogány, A., 2015. Building governance on fragile grounds: lessons from Romania. *Environment and Planning C: Government and Policy* 33, 901-918.

- Cardoso, P., Erwin, T.L., Borges, P.A., New, T.R., 2011. The seven impediments in invertebrate conservation and how to overcome them. *Biological conservation* 144, 2647-2655.
- Carmin, J., VanDeveer, S.D., 2004. Enlarging EU environments: Central and Eastern Europe from transition to accession. *Environmental Politics* 13, 3-24.
- Caro, T., 2010. Conservation by proxy: indicator, umbrella, keystone, flagship, and other surrogate species. Island Press.
- Cartea Roșie a Republicii Moldova, 2015. p. 492, Chișinău: Știința.
- Cash, D.W., Clark, W.C., Alcock, F., Dickson, N.M., Eckley, N., Guston, D.H., Jäger, J., Mitchell, R.B., 2003. Knowledge systems for sustainable development. *Proceedings of the National Academy of Sciences* 100, 8086-8091.
- Catianis, I., Secrieru, D., Pojar, I., Grosu, D., Scriciu, A., Pavel, A.B., Vasiliu, D., 2018. Water quality, sediment characteristics and benthic status of the Razim-Sinoie lagoon system, Romania. *Open Geosciences* 10, 12-33.
- CBD, 1992. Convention on Biological Diversity. U.N.T.S. vol. 1760, p. 79.
- CBD, 1992. United Nations Conference on Environment and Development, Rio de Janeiro.
- CBD, S.o.t., 2020. Global Biodiversity Outlook 5, Montreal.
- CEP, 2002. Transboundary diagnostic analysis for the Caspian Sea, Baku, Azerbaijan.
- Chang, H., Angelis, J., Nauwelaers, C., Posselt, T., Schuch, K., 2017. Peer Review of the Ukrainian Research and Innovation system. Horizon 2020 Policy Support Facility.
- CITES, 1973. Convention on International Trade in Endangered Species of Wild Fauna and Flora. U.N.T.S. vol. 993, p. 243.
- Cognetti, G., Maltagliati, F., 2000. Biodiversity and adaptive mechanisms in brackish water fauna. *Marine pollution bulletin* 40, 7-14.
- Council of Europe, 1979. Convention on the Conservation of European Wildlife and Natural Habitats. European Treaty Series 104.
- Cowling, R.M., Wilhelm-Rechmann, A., 2007. Social assessment as a key to conservation success. Cambridge Univ. Press 32 Avenue of the Americas, New York, NY 10013-2473 USA.
- Crespo, D., Dolbeth, M., Leston, S., Sousa, R., Pardal, M.Â., 2015. Distribution of *Corbicula fluminea* (Müller, 1774) in the invaded range: a geographic approach with notes on species traits variability. *Biological Invasions* 17, 2087-2101.
- Crona, B., Bodin, Ö., 2006. What you know is who you know? Communication patterns among resource users as a prerequisite for co-management. *Ecology and Society* 11.
- Crona, B., Ernstson, H., Prell, C., Reed, M., Hubacek, K., 2011. Combining social network approaches with social theories to improve understanding of natural resource governance, pp. 44-71. Cambridge University Press: Cambridge.
- Crutzen, P.J., 2016. Geology of mankind, In Paul J. Crutzen: A Pioneer on Atmospheric Chemistry and Climate Change in the Anthropocene. pp. 211-215. Springer.
- Csardi, G., Nepusz, T., 2006. The igraph software package for complex network research. *InterJournal, Complex Systems* 1695, 1-9.

- Cuttelod, A., Seddon, M., Neubert, E., 2011. European red list of non-marine molluscs. Publications office of the European Union Luxembourg.
- Davis, J.A., Leinhardt, S., 1967. The structure of positive interpersonal relations in small groups.
- De Klemm, C., Shine, C., 1993. Biological diversity conservation and the law: legal mechanisms for conserving species and ecosystems. IUCN.
- Dean Jr, J.W., Brass, D.J., 1985. Social interaction and the perception of job characteristics in an organization. *Human Relations* 38, 571-582.
- Delreux, T., Happaerts, S., 2016. Environmental policy and politics in the European Union. Macmillan International Higher Education.
- Díaz, C.L., 2010. The Bern Convention: 30 years of nature conservation in Europe. *Review of European Community & International Environmental Law* 19, 185-196.
- Díaz, S., Demissew, S., Carabias, J., Joly, C., Lonsdale, M., Ash, N., Larigauderie, A., Adhikari, J.R., Arico, S., Báldi, A., 2015. The IPBES Conceptual Framework—connecting nature and people. *Current Opinion in Environmental Sustainability* 14, 1-16.
- Díaz, S., Settele, J., Brondízio, E., Ngo, H., Guèze, M., Agard, J., Arneth, A., Balvanera, P., Brauman, K., Butchart, S., Chan, K., Garibaldi, L., Ichii, K., Liu, J., Subramanian, S., Midgley, G., Miloslavich, P., Molnár, Z., Obura, D., Pfaff, A., Polasky, S., Purvis, A., Razzaque, J., Reyers, B., Chowdhury, R., Shin, Y., Visseren-Hamakers, I., Willis, K., Zayas, C., 2019. Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, p. 56, Bonn, Germany.
- Dijkstra, E.W., 1959. A note on two problems in connexion with graphs. *Numerische mathematik* 1, 269-271.
- Dimitrova, A., Buzogány, A., 2014. Post-Accession Policy-Making in Bulgaria and Romania: Can Non-state Actors Use EU Rules to Promote Better Governance? *JCMS: Journal of Common Market Studies* 52, 139-156.
- Dmitrieva, L., Kondakov, A.A., Oleynikov, E., Kydyrmanov, A., Karamendin, K., Kasimbekov, Y., Baimukanov, M., Wilson, S., Goodman, S.J., 2013. Assessment of Caspian seal by-catch in an illegal fishery using an interview-based approach. *PLoS ONE* 8, e67074.
- Dotsenko, S.F., Ivanov, V.A., 2010. Natural disasters in Azov–Black Sea Region. National Academy of Sciences of Ukraine, Marine Hydrophysical Institute. Sevastopol 174.
- Drensky, P., 1947. Synopsis and distribution of freshwater Mollusca in Bulgaria. *Godishnik na Sofiyskiya Ouniversitet, FMF, Kniga* 43, 33-51. [in Bulgarian, English summary].
- DRPC, 1994. Convention on cooperation for the protection and sustainable use of the river Danube. *OJ L342*, p. 19.
- Dubinina, V., Zhukova, S., 2016. Assessment of the possible consequences of the construction of the Bagayevskiy waterworks facility for the Lower Don ecosystem. *Rybnoye khozyaystvo [Fisheries]* 4, 20-30. [in Russian].
- Dudgeon, D., 2012. Threats to freshwater biodiversity globally and in the Indo-Burma Biodiversity Hotspot. *The Status and Distribution of Freshwater Biodiversity in Indo-Burma*, 1-28.
- Dudgeon, D., Arthington, A.H., Gessner, M.O., Kawabata, Z.-I., Knowler, D.J., Lévéque, C., Naiman, R.J., Prieur-Richard, A.-H., Soto, D., Stiassny, M.L., 2006. Freshwater biodiversity: importance, threats, status and conservation challenges. *Biological Reviews* 81, 163-182.

- Dudley, N., 2008. Guidelines for applying protected area management categories. IUCN.
- Dumont, H., Mamaev, V., Zaitsev, Y., 1999. Black Sea Red Data Book. United Nations Office for Project Services, 413.
- Durham, E., Baker, H., Smith, M., Moore, E., Morgan, V., 2014. BiodivERsA Stakeholder Engagement Handbook. BiodivERsA: Paris, France.
- Dzhurtubaev, Y.M., Dzhurtubaev, M., Zamorov, V., 2018. Macrozoobenthos of Danubian Lake Kugurluy (Odessa region, Ukraine). Ukrainian Journal of Ecology 8, 898-905. [in Russian].
- Dzhurtubaev, Y.M., Dzhutubaev, M., Zamorov, V., 2017. Macrozoobenthos of Danubian Lake Yalpug (Odessa region, Ukraine). Ukrainian Journal of Ecology 7, 160-168. [in Russian].
- ECODIT LLC, 2017. Ukraine Biodiversity Analysis. United States Agency for International Development, Arlington, USA.
- Ecological Atlas, 2019. The Black Sea and the Sea of Azov. In series: Ecological Atlases of the Russian Seas. . Moscow, "NIR" Foundation, 464. [in Russian].
- Ernoult, L., Wardell-Johnson, A., 2013. Governance in integrated coastal zone management: a social networks analysis of cross-scale collaboration. Environmental Conservation 40, 231-240.
- Ernstson, H., Sörlin, S., Elmquist, T., 2008. Social movements and ecosystem services—The role of social network structure in protecting and managing urban green areas in Stockholm. Ecology and Society 13.
- Eschmeyer, W.N., Bailey, R.M., 1990. Catalog of the genera of recent fishes. California Academy of Sciences.
- EU, 1992. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, ed. O.J.o.t.E. Union, pp. 7-50.
- EU, 1996. Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, p. 1.
- EU, 2000. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, ed. O.J.o.t.E. Union, pp. 1-73.
- EU, 2009. Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, ed. O.J.o.t.E. Union, pp. 7-25.
- European Commission, 2018. Burgas Vision Paper. A Blue Growth Initiative for Research and Innovation in the Black Sea, Burgas, Bulgaria.
- European Commission, 2019. The EU Environmental Implementation Review 2019, Country Report - Romania, Brussels, Belgium.
- European Commission, 2020. EU Biodiversity Strategy for 2030, Brussels.
- Evans, D., 2012. Building the European union's Natura 2000 network. Nature conservation 1, 11.
- Favreau, J.M., Drew, C.A., Hess, G.R., Rubino, M.J., Koch, F.H., Eschelbach, K.A., 2006. Recommendations for assessing the effectiveness of surrogate species approaches. Biodiversity & Conservation 15, 3949-3969.
- Fazey, I., Evely, A.C., Reed, M.S., Stringer, L.C., Kruijsen, J., White, P.C., Newsham, A., Jin, L., Cortazzi, M., Phillipson, J., 2013. Knowledge exchange: a review and research agenda for environmental management. Environmental Conservation 40, 19-36.

## REFERENCES

- Filipenko, S., 2011. The current state of the benthic communities of the Kuchurgan Reservoir – the cooler of the Moldavian GRES // Vestnik Pridnestrovskogo Universiteta. SER.: MEDIKO-BIOLOGICHESKIE I HIMICHESKIE NAUKI 2, 83-90.
- Francis, R.A., Goodman, M.K., 2010. Post-normal science and the art of nature conservation. *Journal for nature conservation* 18, 89–105.
- Freeman, L.C., 1977. A set of measures of centrality based on betweenness. *Sociometry*, 35-41.
- Freeman, L.C., 1978. Centrality in social networks conceptual clarification. *Social networks* 1, 215-239.
- Freeman, L.C., Roeder, D., Mulholland, R.R., 1979. Centrality in social networks: II. Experimental results. *Social networks* 2, 119-141.
- Freyhof, J., Brooks, E., 2011. European Red List of Freshwater Fishes (Publications Office of the European Union, Luxembourg).
- Fuhse, J., Mütsel, S., 2011. Tackling connections, structure, and meaning in networks: quantitative and qualitative methods in sociological network research. *Quality & quantity* 45, 1067-1089.
- Gastescu, P., 2009. The Danube Delta biosphere reserve. *Geography, biodiversity, protection, management. Rev Roum Géogr* 53, 139-152.
- Genov, I., Peychev, V., 2001. Holocene sediments from West part of Black Sea. *Works of the Institute of Oceanology, Varna* 3, 29–42.
- Georgiev, D., Hubenov, Z., 2013. Freshwater snails (Mollusca: Gastropoda) of Bulgaria: an updated annotated checklist. *Folia Malacologica* 21, 237-263.
- Giosan, L., Bokuniewicz, H., Panin, N., Postolache, I., 1999. Longshore sediment transport pattern along the Romanian Danube delta coast. *Journal of Coastal Research*, 859-871.
- Giurca, A., Metz, T., 2017. A social network analysis of Germany's wood-based bioeconomy: Social capital and shared beliefs. *Environmental Innovation and Societal Transitions*.
- Glaser, B.G., Strauss, A.L., Strutzel, E., 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research* New York Aldine De Gruyter. Inc.
- Glowka, L., Shine, C., Santos, O.R., Phărūka, M., Gündling, L., 1998. A guide to undertaking biodiversity legal and institutional profiles. IUCN-The World Conservation Union.
- Gogaladze, A., Raes, N., Biesmeijer, J.C., Ionescu, C., Pavel, A.B., Son, M.O., Gozak, N., Anistratenko, V., Wesselingh, F.P., 2020a. Social network analysis and the implications for Pontocaspian biodiversity conservation in Romania and Ukraine: A comparative study, In PLoS ONE. p. 740084.
- Gogaladze, A., Son, M.O., Lattuada, M., Anistratenko, V.V., Syomin, V.L., pavel, A.B., popa, O.P., popa, L.O., Poorten, J.-J.t., Biesmeijer, J.C., Raes, N., Wilke, T., Sands, A.F., Trichkova, T., Hubenov, Z.K., Vinarski, M.V., Anistratenko, O.Y., Alexenko, T.L., P, W.F., Submitted. Decline of unique Pontocaspian biodiversity in the Black Sea Basin: a review. *Diversity and Distributions*.
- Gogaladze, A., Wesselingh, F.P., Biesmeijer, K., Anistratenko, V., Gozak, N., Son, M.O., Raes, N., 2020b. Using social network analysis to assess the Pontocaspian biodiversity conservation capacity in Ukraine. *Ecology and Society* 25.

- Golikov, A.N., Starobogatov, Y.I., 1966. Ponto-kaspiyskiy bryukhonogiye mollyuski v Azovo-Chernomorskem basseyne. *Zoological Journal* 45, 352-362.
- Golikov, A.N., Starobogatov, Y.I., 1972. Molliuski-Klass Briukhonogie [Mollusca-Gastropoda]. Opredeliteli Fauny Chernogo i Azovskogo Morei [Identification key to the fauna of the Black and Azov Seas, free living invertebrates: Arthropoda (besides Crustacea), Mollusca, Echinodermata, Chaetognatha, Chordata] 3, 65-166.
- Gomar, J.O.V., Stringer, L.C., Paavola, J., 2014. Regime complexes and national policy coherence: Experiences in the biodiversity cluster. *Global Governance: A Review of Multilateralism and International Organizations* 20, 119-145.
- Gomoiu, M., Skolka, M., 1996. Changements recents dans la biodiversite de la Mer Noire dus aux immigrants. *Geo-eco-marina* 1, 34-48.
- Gomoiu, M., Skolka, M., 1998. Cresterea biodiversitatii prin imigrare-noi specii in fauna Romaniei. Increase of biodiversity by immigration-new species for the Romanian fauna. "Ovidius" University Annals of Natural Science, Biology-Ecology series 2, 181-202.
- Granovetter, M.S., 1973. The strength of weak ties. *American journal of sociology* 78, 1360-1380.
- Grigorovich, I.A., Therriault, T.W., MacIsaac, H.J., 2003. History of aquatic invertebrate invasions in the Caspian Sea, In Marine bioinvasions: Patterns, processes and perspectives. pp. 103-115. Springer.
- Grilli, G., Garegnani, G., Poljanec, A., Ficko, A., Vettorato, D., De Meo, I., Paletto, A., 2015. Stakeholder analysis in the biomass energy development based on the experts' opinions: the example of Triglav National Park in Slovenia. *Folia Forestalia Polonica* 57, 173-186.
- Grinbart, S.B., 1953a. Bentos Dnistrovskovo limana i nizoviev Dnestra, ego kormovaia otsenka // Materiali po gidrobiologii i rybolovstvu limanov severno-zapadnogo Prichernomoria (Benthos of the Dniester estuary and the lower reaches of the Dniester, assessment of its nutritional value // Materials on hydrobiology and fishing in the limans of the northwestern Black Sea). Odessa University, 7-17.
- Grinbart, S.B., 1953b. K izucheniu zoobentosa Tiligul'skogo limana i ego kormovykh resursov (On the study of zoobenthos of the Tiligul estuary, and its feeding resources). Odessa University, 85-106. [in Russian].
- Grinbart, S.B., 1955. Materials for studying the zoobenthos of the Berezan Liman. Trudy Odesskogo Gosudarstvennogo Universiteta im. I. I. Mechnikova. Ser. Biol. 145, 3-180.
- Grinevetsky, S.R., Zonn, I.S., Zhiltsov, S.S., Kosarev, A.N., Kostianoy, A.G., 2016. The Black Sea Encyclopedia. Springer.
- Grossu, A.V., 1956. Fauna Republicii Populare Române. Mollusca, 3 (2). Gastropoda, Prosobranchia si Opisthobranchia. Academieie Republicii Populare Romine, Bucureşti.
- Grossu, A.V., 1962. Fauna Republicii Populare Române Molusca. Editura Academiei Republicii Populare Romine, Bucureşti 3, 426. [in Romanian].
- Grossu, A.V., 1973. Les Limnocardidiades actuelles du bassin Ponto-Caspique. Informations de la Société belge Belge de malacologieMalacologie.
- Grossu, A.V., 1986. Gastropoda Romaniae. Editura Litera.
- Groves, C., Valutis, L., Vosick, D., Neely, B., Wheaton, K., Touval, J., Runnels, B., 2000. Designing a geography of hope: A practitioner's handbook for ecoregional conservation planning. Volumen 1 y 2. The Nature Conservancy, Virginia (EUA).

## REFERENCES

- Gubbay, S., Sanders, N., Haynes, T., Janssen, J., Rodwell, J., Nieto, A., Criado, M.G., Beal, S., Borg, J., 2016. European red list of habitats, part 1: marine habitats. European Union.
- Hauck, J., Schmidt, J., Werner, A., 2016. Using social network analysis to identify key stakeholders in agricultural biodiversity governance and related land-use decisions at regional and local level. *Ecology and Society* 21.
- Hauck, J., Stein, C., Schiffer, E., Vandewalle, M., 2015. Seeing the forest and the trees: facilitating participatory network planning in environmental governance. *Global environmental change* 35, 400-410.
- Haythornthwaite, C., 1996. Social network analysis: An approach and technique for the study of information exchange. *Library & information science research* 18, 323-342.
- Heberling, J.M., Miller, J.T., Noesgaard, D., Weingart, S.B., Schigel, D., 2021. Data integration enables global biodiversity synthesis. *Proceedings of the National Academy of Sciences* 118.
- Hermoso, V., Clavero, M., Villero, D., Brotons, L., 2017. EU's conservation efforts need more strategic investment to meet continental commitments. *Conservation Letters* 10, 231-237.
- Herz, A., Peters, L., Truschkat, I., 2015. How to do qualitative strukturelle Analyse? The qualitative interpretation of network maps and narrative interviews, In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*.
- Hortal, J., de Bello, F., Diniz-Filho, J.A.F., Lewinsohn, T.M., Lobo, J.M., Ladle, R.J., 2015. Seven shortfalls that beset large-scale knowledge of biodiversity. *Annual Review of Ecology, Evolution, and Systematics* 46, 523-549.
- Hubenov, Z., 2001. Corbiculidae: a new family to the Bulgarian recent Malacofauna (Mollusca: Bivalvia). *Acta zoologica bulgarica* 53, 61-66.
- Hubenov, Z., 2006. *Anodonta (Sinanodonta) woodiana* (Lea, 1834)(Mollusca: Bivalvia: Unionidae)—a new invasive species for the Bulgarian malacofauna. *Acta zoologica bulgarica* 58, 35-40.
- Hubenov, Z., 2007. Fauna and zoogeography of marine, freshwater, and terrestrial mollusks (Mollusca) in Bulgaria, In *Biogeography and ecology of Bulgaria*. pp. 141-198. Springer.
- Hubenov, Z., 2015. Species composition of the free living multicellular invertebrate animals (Metazoa: Invertebrata) from the Bulgarian sector of the Black Sea and the coastal brackish basins. *Historia naturalis bulgarica* 21, 49-168.
- Hubenov, Z., Trichkova, T., 2007. *Dreissena bugensis* (Mollusca: Bivalvia: Dreissenidae): New invasive species to the Bulgarian malacofauna. *Acta zoologica bulgarica* 59, 203-209.
- Hubenov, Z., Trichkova, T., Kenderov, L., Kozuharov, D., 2012. Recent distribution of invasive alien mussels *Anodonta woodiana* and *Corbicula fluminea* (Mollusca: Bivalvia: Unionidae & Corbiculidae) in Bulgaria. *Journal of International Scientific Publications: Ecology & Safety* 6, 269-284.
- Hubenov, Z., Trichkova, T., Kenderov, L., Kozuharov, D., 2013. Distribution of *Corbicula fluminea* (Mollusca: Corbiculidae) over an eleven-year period of its invasion in Bulgaria. *Acta zoologica bulgarica* 65, 315-326.
- Huisman, M., 2009. Imputation of missing network data: some simple procedures. *Journal of Social Structure* 10, 1-29.
- ICPDR, 2008. Joint Danube Survey 2, Final Scientific Report, In ICPDR Secretariat, Vienna International Centre. Vienna, Austria.
- ICPDR, 2015a. The Danube river basin district management plan. ICPDR-Internat. Commission for the Protection of the Danube River Secretariat.
- ICPDR, 2015b. Joint Danube Survey 3. A comprehensive analysis of Danube water quality, Vienna.

- ICPDR, 2018. Sturgeon Strategy.
- ICPDR, 2020. Sturgeon 2020. A program for the protection and rehabilitation of Danube sturgeons ed. D.S.T.F. (DSTF).
- Ignat, G., Cristofor, S., Angheluță, V., Rîșnoveanu, G., Naftoaniță, G., Florescu, C., 1997. Structure and dynamics of benthic fauna in Danube Danube and Danube Delta, Scientific Annals of the Danube Delta Research and Design Institute. IV, 133-142.
- Isaac, M.E., 2012. Agricultural information exchange and organizational ties: The effect of network topology on managing agrodiversity. Agricultural systems 109, 9-15.
- Iwanski, T., 2011. Ukraine-Romania: a sustained deadlock. OSW Centre for Eastern Studies 30.
- Janssen, J., Rodwell, J., Criado, M., 2016. European red list of habitats, part 2: terrestrial and freshwater habitats. European Union.
- Jarvis, R.M., 2015. Putting people back in the picture: a social research agenda for a social-ecological approach to conservation planning. Auckland University of Technology.
- Jordan, R.C., Ballard, H.L., Phillips, T.B., 2012. Key issues and new approaches for evaluating citizen-science learning outcomes. Frontiers in Ecology and the Environment 10, 307-309.
- Kaneva-Abadjieva, V., 1957. Mollusca und Malacostraca im Varnasee. Arbeiten aus der Biologischen Meeresstation, Varna 19, 127–154. [in Bulgarian, Russian and German summaries].
- Kantor, Y.I., Sysoev, A., 2006. Marine and Brackish water Gastropoda of Russia and adjacent countries: an illustrated catalogue. KMK Scientific Press, Moscow, 371 + plates pp.
- Ketelaars, H.A., 2004. Range extensions of Ponto-Caspian aquatic invertebrates in continental Europe, In Aquatic invasions in the Black, Caspian, and Mediterranean seas. pp. 209-236. Springer.
- Khalaime, A., Son, M., 2016. Biologo-ekologicheskaya kharakteristika *Hypanis laeviuscula fragilis* (Milachevitch, 1908) (Mollusca, Cardiidae) vodokhranilisha Sasyk. Uzhgorod University Scientific Bulletin: Series: Biology, 59-63. [in Russian].
- Khlebovich, V.V., 1974. The critical salinity of biological processes. Nauka, Leningrad, 235 pp. [in Russian].
- Kijashko, P., 2013. Chapter 5. Mollusca of the Caspian Sea. In: Bogutskaya, N.G., P.V. Kijashko, A.M. Naseka & M.I. Orlova. Identification keys for fish and invertebrates of the Caspian Sea. 1 Fish and Molluscs, St. Petersburg/Moscow.
- Kiseleva, M.I., 2004. Polychaetes (Polychaeta) of the Azov and Black Seas [Mnogoshetinkovye chervi (polychaeta) Chernogo i Azovskogo morey]. Russian Academy of Science, Murmansk Marine Biological Institute, Apatity, Kola Science Centre, pp. 409. [in Russian].
- Kittinger, W., 1997. The Danube River Protection Convention, In Protecting Danube River Basin Resources. pp. 43-47. Springer.
- Kleinberg, J.M., 1998. Authoritative sources in a hyperlinked environment, In In Proceedings of the ACM-SIAM Symposium on Discrete Algorithms. Citeseer.
- Kluvankova-Oravská, T., Chobotová, V., Banaszak, I., Slavíková, L., Trifunovová, S., 2009. From government to governance for biodiversity: the perspective of central and Eastern European transition countries. Environmental Policy and Governance 19, 186-196.

- Knoke, D., Kuklinski, J.H., 1991. Network analysis: basic concepts. Markets, hierarchies and networks: the coordination of social life, 173-182.
- Koester, V., 2002. The five global biodiversity-related conventions: a stocktaking. Rev. Eur. Comp. & Int'l Envtl. L. 11, 96.
- Korpakova, I., Afanasyev, D., Barabashin, T., Tsybulsky, I., Belova, L., Naletova, L., Bychkova, M., 2007. Hydrobiological features of the estuary area of the Temryuk Bay of the Sea of Azov. Environmental Protection in the Oil and Gas Complex 9, 69-75. [in Russian].
- Korpakova, I., Afanasyev, D., Tsybulsky, I., Barabashin, T., Belova, L., Naletova, L., Bychkova, M., 2010. Benthic and planktonic communities of estuaries of the Kuban River delta. News of higher educational institutions. North Caucasus region. Natural sciences 2, 78-81. [in Russian].
- Korpakova, I., Tsybulsky, I., Afanasyev, D., Barabashin, T., Belova, L., Naletova, L., Bychkova, M., 2008. Hydrobiological characteristics of the south-eastern part of the Sea of Azov. Environmental Protection in the Oil and Gas Complex 11, 70-80. [in Russian].
- Kostianoy, A.G., Kosarev, A.N., 2005. The Caspian Sea Environment. Springer Science & Business Media.
- Kotiaho, J.S., Halme, P., 2018. The IPBES assessment report on land degradation and restoration.
- Kovachev, S., Stoichev, S., Hainadjieva, V., 1999. The zoobenthos of several lakes along the Northern Bulgarian Black Sea Coast. Lauterbornia 35, 33-38.
- Kovalenko, E.P., 2009. Donnyye bespozvonochnyye krupnykh vodotokov del'ty Dona (Bottom invertebrates of large watercourses of the Don delta), In VI International Scientific and Practical Conference of Young Scientists, dedicated to the ecological problems of aquatic ecosystems. p. 55. [in Russian], Sevastopol.
- Kowalski, A.A., Jenkins, L.D., 2015. The role of bridging organizations in environmental management: examining social networks in working groups. Ecology and Society 20.
- Koyano, M., 2008. The significance of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) in international environmental law: examining the implications of the Danube Delta case. Impact Assessment and Project Appraisal 26, 299-314.
- Krapal, A.M., Popa, O.P., Levarda, A., Iorgu, E.I., Popa, L.O., Costache, M., Crocetta, F., 2015. Molecular Confirmation on the Presence of *Anadara kagoshimensis* (Tokunaga, 1906)(Mollusca: Bivalvia: Arcidae) in the Black Sea/ Confirmarea moleculară a prezenței speciei *Anadara kagoshimensis* (Tokunaga, 1906)(Mollusca: Bivalvia: Arcidae) în Marea Neagră. Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa" 57, 9-12.
- Kreneva, S., Kreneva, K., Golovko, G., 2013. Assessment of the biocenoses' state in the Mius Liman of the Sea of Azov. Bulletin of the Southern Scientific Centre, 9 (4), 9, 71-77 [in Russian].
- Krijgsman, W., Tesakov, A., Yanina, T., Lazarev, S., Danukalova, G., Van Baak, C.G., Agustí, J., Alçıçek, M., Aliyeva, E., Bista, D., 2019. Quaternary time scales for the Pontocaspian domain: Interbasinal connectivity and faunal evolution. Earth-science reviews 188, 1-40.
- Krivoshey, V., 2016. On the project of the Bagayevskiy waterworks facility. Astrakhanskiy vestnik ekologicheskogo obrazovaniya [Astrakhan Bulletin of Environmental Education] 2, 76-80. [in Russian].
- Landman, T., 2002. Issues and methods in comparative politics: an introduction. Routledge.

- Lattuada, M., Albrecht, C., Wesselingh, F.P., Klinkenbuß, D., Vinarski, M.V., Kijashko, P., Raes, N., Wilke, T., 2020. Endemic Caspian Sea mollusks in hotspot and non-hotspot areas differentially affected by anthropogenic pressures. *Journal of Great Lakes Research*.
- Lattuada, M., Albrecht, C., Wilke, T., 2019. Differential impact of anthropogenic pressures on Caspian Sea ecoregions. *Marine pollution bulletin* 142, 274-281.
- Latypov, Y.Y., 2015. The Bivalve Mollusc *Abra ovata*: role in succession of soft bottom communities on newly flooded area of the Caspian Sea. *American Journal of Climate Change* 4, 239.
- Lazega, E., Quintane, E., Casenaz, S., 2017. Collegial oligarchy and networks of normative alignments in transnational institution building. *Social networks* 48, 10-22.
- Leavitt, H.J., 1951. Some effects of certain communication patterns on group performance. *The Journal of Abnormal and Social Psychology* 46, 38.
- Lee, K.N., 1999. Appraising adaptive management. *Conservation ecology* 3.
- Lindholm, W.A., 1908. Materialien zur Molluskenfauena [sic] von Südwestrussland, Polen und der Krim. *Zapiski Novorossijskago Obshchestva Estestvoispytatelej* 31, 199–232.
- Lundberg, J.G., Kottelat, M., Smith, G.R., Stiassny, M.L., Gill, A.C., 2000. So many fishes, so little time: an overview of recent ichthyological discovery in continental waters. *Annals of the Missouri Botanical Garden*, 26-62.
- Lyashenko, A., Zorina-Sakharova, Y.Y., Makovskiy, V., Sanzhak, Y.O., 2012. Modern state of the Ponto-Caspian complex of the macrofauna of invertebrates in the Lower Reaches of the Danube River within the territory of Ukraine. *Hydrobiological Journal* 48.
- Makarov, A.K., 1938. Rasprostraneniye nekotorykh rakoobraznykh (Mysidacea, Cumacea) i limannnykh mollyuskov v ust'yakh i otkrytykh limanakh Severnogo Prichernomor'ya [Distribution of some crustaceans (Mysidacea, Cumacea) and liman mollusks in estuaries and open limans of the northern Black Sea region]. *Zoological Journal* 17, 1055-1062. [in Russian].
- Male, T.D., Bean, M.J., 2005. Measuring progress in US endangered species conservation. *Ecology Letters* 8, 986-992.
- Manolache, S., Ciocanea, C.M., Rozylowicz, L., Nita, A., 2017. Natura 2000 in Romania—a decade of governance challenges. *Eur. J. Geogr* 8, 24-34.
- Manolache, S., Nita, A., Ciocanea, C.M., Popescu, V.D., Rozylowicz, L., 2018. Power, influence and structure in Natura 2000 governance networks. A comparative analysis of two protected areas in Romania. *Journal of Environmental Management* 212, 54-64.
- Marinov, T., 1990. The zoobenthos from the Bulgarian sector of the Black Sea. 195 pp. Sofia (BAN). [in Bulgarian, with Russian and English summary].
- Markovsky, B., Willer, D., Patton, T., 1988. Power relations in exchange networks. *American Sociological Review*, 220-236.
- Markovsky, Y.M., 1953. Fauna bespozvonochnykh nizov'ev rek Ukrayiny, usloviya sushchestvo vaniya i puti ispol'zovaniya. Chast' 1. Vodoemy delty Dnestra i Dnistrovskii liman [Fauna of invertebrates of the lower river streams of Ukraine, life conditions and ways of utilization. Part 1. The basin of the Dniester delta and Dniester lagoon.]. AN USSR, Kiev, 1-207. [in Russian].

- Markovsky, Y.M., 1954a. Fauna bespozvonochnykh nizov'ev rek Ukrayiny, usloviya sushchestvovaniya i puti ispol'zovaniya. Chast' 2. Dneprovsko-Bugskii liman [Fauna of invertebrates of the lower river streams of Ukraine, life conditions and ways of utilization. Part 2. Dnieper-Bug lagoon.]. AN USSR, Kiev, 1-207. [in Russian].
- Markovsky, Y.M., 1954b. Rezul'taty raboty Instituta gidrobiologii Akademii Nauk USSR po pereseleniyu nekotorykh kormovykh bespozvonochnykh. [The work results of the Hydrobiological Institute of USSR Academy of Sciences on the resettlement of some forage invertebrates]. Trudy soveshchanii ikhtiologicheskoi komissii AN SSSR 3, 151-158. [in Russian].
- Markovsky, Y.M., 1955. Fauna bespozvonochnykh nizov'ev rek Ukrayiny, usloviya sushchestvovaniya i puti ispol'zovaniya. Chast' 3. Vodoemy Kilijskoi defty Dunaya [The fauna of invertebrates of the lower river streams of Ukraine, life conditions and ways of utilization. Part 3. The basin of the Kilian delta of the Danube]. AN USSR, Kiev, 1-275. [in Russian].
- Marret, F., Leroy, S., Chalié, F., Françoise, F., 2004. New organic-walled dinoflagellate cysts from recent sediments of Central Asian seas. Review of Palaeobotany and Palynology 129, 1-20.
- Martín-López, B., Montes, C., Benayas, J., 2007. The non-economic motives behind the willingness to pay for biodiversity conservation. Biological conservation 139, 67-82.
- Martín-López, B., Montes, C., Ramírez, L., Benayas, J., 2009. What drives policy decision-making related to species conservation? Biological conservation 142, 1370-1380.
- Matishov, G., 2005. System approach to the water quality and bioproductivity of the Azov Sea basin. WIT Transactions on Ecology and the Environment 83.
- Matishov, G.G., Grigorenko, K.S., 2017. Causes of salinization of the Gulf of Taganrog. Doklady Earth Sciences 477, 1311-1315. [in Russian].
- Matishov, G.G., Grigorenko, K.S., Moskovets, A.Y., 2017. The salinization mechanisms in the Taganrog Bay under the conditions of the Don River extremely low runoff. Science in the South of Russia 13, 35-43. [in Russian].
- Matthews, G.V.T., 1993. The Ramsar Convention on Wetlands: its history and development. Ramsar Convention Bureau Gland.
- Mihailova-Neikova, M., 1961. Hydrobiological research of the Mandra Lake with regard to its importance as a fishing ground. Godishnik na Sofiyskiya Ouniversitet, BGGF, Kniga 53 (1. Zoology), 57-123. [in Bulgarian].
- Mikhailov, V., Gorin, S., 2012. New definitions, regionalization, and typification of river mouth areas and estuaries as their parts. Water Resources 39, 247-260.
- Milaschewitsch, K.O., 1916. Mollyuski russkikh morey. Tom 1. Mollyuski Chernago i Azovs-kago morey [Molluscs of the seas of Russia. Tome 1. Molluscs of the Black Sea and the Sea of Azov]. Fauna Rossii i sopredelnykh stran. Imperatorskaya Akademiya Nauk, Zoologicheskiy Muzey, Petrograd, 1-312.
- Mills, M., Álvarez-Romero, J.G., Vance-Borland, K., Cohen, P., Pressey, R.L., Guerrero, A.M., Ernstson, H., 2014. Linking regional planning and local action: Towards using social network analysis in systematic conservation planning. Biological conservation 169, 6-13.
- Ministry of Ecology and Natural Resources of Ukraine, 2015. Fifth national report of Ukraine to the Convention on Biological Diversity.

- Ministry of Ecology and Natural Resources of Ukraine, 2018. Sixth National Report of Ukraine on the Implementation of the Convention on Biological Diversity, Kiev.
- Ministry of Environment and Climate Change of Romania, 2014. Fifth National Report of Romania to the Convention on Biological Diversity.
- Mizruchi, M.S., Galaskiewicz, J., 1993. Networks of interorganizational relations. *Sociological Methods & Research* 22, 46-70.
- Monchenko, V.I., 2003. Free-living cyclopoid copepods of Ponto-Caspian basin. Kiev: Naukova dumka, 1-350. [in Russian].
- Monge, P.R., Edwards, J.A., Kirste, K.K., 1983. Determinants of communication network involvement: Connectedness and integration. *Group & Organization Studies* 8, 83-111.
- Mordukhay-Boltovskoy, F., 1960. Kaspiyskaya fauna v Azovo-Chernomorskem basseyne. Izdatel'stvo Akademii Nauk SSSR, Leningrad, 228 pp.
- Moreno, J.L., 1953. Who shall survive? Foundations of sociometry, group psychotherapy and socio-drama.
- Moroz, T.G., Alexenko, T.L., 1983. Benthos of the Dnieper-Bug Liman following the regulation of the Dnieper River run-off. *Gidrobiologicheskiy Zhurnal* 19, 33-40.
- Moroz, T.G., Alexenko, T.L., Bortkevich, L.V., Sobolenko, A.Z., 1986. Benthos des lagunes saumâtres de la Tiligule. *Hydrobiological Journal* 22, 31-35.
- Moses, W.J., Gitelson, A.A., Berdnikov, S., Saprygin, V., Povazhnyi, V., 2012. Operational MERIS-based NIR-red algorithms for estimating chlorophyll-a concentrations in coastal waters—The Azov Sea case study. *Remote Sensing of Environment* 121, 118-124.
- Munasypova-Motyash, I.A., 2006. O sovremennoi faune dvustvorchatix molluskov podsemeistva Limnocardiinae (Bivalvia, Cardiidae) Severno-Zapadnogo Prichernomoria [On the recent fauna of subfamily Limnocardiinae (Bivalvia, Cardiidae) in North-Western shore of Black Sea]. *Vestnik zoologii* 40, 41-48.
- Munasypova-Motyash, I.A., 2009a. *Hypanis laeviuscula* (Milachevitch, 1916), In Red Data Book of Ukraine. Animal World. ed. I.A. Akimov, p. 306. Globalconsulting, Kiev, Ukraine.
- Munasypova-Motyash, I.A., 2009b. *Hypanis plicata* (Milashevitch, 1916), In Red Data Book of Ukraine. Animal World. ed. I.A. Akimov, p. 307. Globalconsulting, Kiev, Ukraine.
- Munjiu, O., 2012. The modern species composition of freshwater mollusks from Moldova, In Geoelectrical and bioecological problems of the north Black Sea coast. pp. 205–207. [in Russian]. Tiraspol.
- Munteanu, A., Ehlinger, T., Golumbeanu, M., Tofan, L., 2013. Network environmental governance in the EU as a framework for trans-boundary sturgeon protection and cross-border sustainable management. *Journal of Environmental Protection and Ecology* 14, 685-692.
- N'Guyen, A., 2016. Non-native goby species in Switzerland: impacts and management. University\_of\_Basel.
- Nabozhenko, M.V., 2005. Distribution of the genus *Hypanis* Pander in Ménétriés, 1832 (Bivalvia, Cardioidea: Limnocardiidae) in the Taganrog Gulf (The Sea of Azov). *Ekologiya Morya*, 44.
- Nabozhenko, M.V., 2008. Distribution of Mollusks of the Subfamily Lynmocardiinae (Bivalvia, Cardiidae) in the Basin of the Azov Sea. *Vestnik. YuNTs RAN* 4, 78-82.

- Nabozhenko, M.V., Kovalenko, E.P., 2011. Contemporary distribution of macrozoobenthic communities of the Yeisk estuary (Taganrog Bay of the Sea of Azov). *Oceanology* 51, 626-631.
- Nagalevsky, Y., Lobko, N., 2017. Specially Protected Natural Territories of the Kuban River Delta. *Regional Geographical Studies* 1, 11-16. [in Russian].
- Nagalevsky, Y., Nagalevsky, E., 2013. Geographic and hydrological zoning of the Kuban delta estuaries. Classification schemes. *Environmental Protection in the Oil and Gas Complex* 12, 69-74. [in Russian].
- National Research Council, 2000. Clean coastal waters: understanding and reducing the effects of nutrient pollution. National Academies Press.
- Nekrasova, M.Y., 1972. Zoobenthos of the Azov Sea after the control of the Don River. *Zoological Journal* 51, 789-798. [in Russian].
- Newman, L., Dale, A., 2005. Network structure, diversity, and proactive resilience building: a response to Tompkins and Adger. *Ecology and Society* 10.
- Newman, L., Dale, A., 2007. Homophily and agency: creating effective sustainable development networks. *Environment, Development and Sustainability* 9, 79-90.
- Newman, M.E., 2003. The structure and function of complex networks. *SIAM review* 45, 167-256.
- Newman, M.E., 2004. Analysis of weighted networks. *Physical review E* 70, 056131.
- Newman, M.E., Girvan, M., 2004. Finding and evaluating community structure in networks. *Physical review E* 69, 026113.
- Nita, A., Rozylowicz, L., Manolache, S., Ciocănea, C.M., Miu, I.V., Popescu, V.D., 2016. Collaboration networks in applied conservation projects across Europe. *PLoS ONE* 11, e0164503.
- OECD, 2019. Biodiversity: Finance and the Economic and Business Case for Action, report prepared for the G7 Environment Ministers' Meeting, 5-6 May 2019.
- Olivari, G., 1953. Benthos of the Lower Dnieper. *Trudy Instituta Gidrobiologii AN USSR* 31, 35-61. [in Russian].
- Olsson, P., Folke, C., Hahn, T., 2004. Social-ecological transformation for ecosystem management: the development of adaptive co-management of a wetland landscape in southern Sweden. *Ecology and Society* 9.
- Opsahl, T., 2009. Structure and evolution of weighted networks. Queen Mary, University of London.
- Opsahl, T., Agneessens, F., Skvoretz, J., 2010. Node centrality in weighted networks: Generalizing degree and shortest paths. *Social networks* 32, 245-251.
- Opsahl, T., Colizza, V., Panzarasa, P., Ramasco, J.J., 2008. Prominence and control: the weighted rich-club effect. *Physical review letters* 101, 168702.
- Orlova, M., 1987. Differences in salinity tolerance of *Dreissena* in the lower Dnieper River and the Dnieper-Bug Liman, In Abstracts of the 8th meeting on the investigation of molluscs. Nauka Press, Leningrad. pp. 261-263.
- Orlova, M.I., Khlebovich, V.V., Komendantov, A.Y., 1998. Potential euryhalinity of *Dreissena polymorpha* (Pallas) and *Dreissena bugensis* (Andr.). *Russ. J. Aquat. Ecol* 7, 17-28.
- Orlova, M.I., Therriault, T.W., Antonov, P.I., Shcherbina, G.K., 2005. Invasion ecology of quagga mussels (*Dreissena rostriformis Bugensis*): a review of evolutionary and phylogenetic impacts. *Aquatic Ecology* 39, 401-418.
- Ostrom, E., Burger, J., Field, C.B., Norgaard, R.B., Policansky, D., 1999. Revisiting the commons: local lessons, global challenges. *Science* 284, 278-282.

- Ostroumov, A.A., 1898. Brief report on hydrobiological studies in 1897. *Izvestiya Peterburgskoy AN* 7, 78-91.
- Paletto, A., Hamunen, K., De Meo, I., 2015. Social network analysis to support stakeholder analysis in participatory forest planning. *Society & natural resources* 28, 1108-1125.
- Pandourski, I., 2001. Recherches hydrobiologiques des zones humides de la côte bulgare de la Mer Noire. I. Le lac de Vaja. *Riv. Idrobiol* 40, 321-334.
- Paraschiv, G.-M., Begun, T., Teaca, A., Bucur, M., Tofan, L., 2010a. New data about benthal populations of the Golovita and Zmeica lakes. *Journal of Environmental Protection and Ecology* 11, 253-260.
- Paraschiv, G.-M., Tofan, L., Schroder, V., Bucur, M., 2010b. Analysis of zoobenthal communities from the Razim-sinoe lagoon complex. *Journal of Environmental Protection and Ecology* 11, 261-268.
- Paunović, M., Csányi, B., 2018. Guidance document on Invasive Alien Species (IAS) in the Danube River Basin. Version March 2018. ICPDR – International Commission for the Protection of the Danube River, p. 61 pp.
- Pavel, A., Dutui, L., Patriche, N., 2017. The benthic fauna associations from the meanders are of Danube -Sfantu Gheorghe branch, in the period 2016-2017. *Geo-Eco-Marina* 23/2017, 233-244.
- Pavel, A.B., MENABIT, S., Mânzală, D., LUPAȘCU, N., Pop, I.C., Catianis, I., 2019. Benthic community structure characterization of the bed-sediment layer composition in the Musura Bay and Sakhalin area. *Geo-eco-marina* 25, 15-29.
- Pebesma, E.J., 2018. Simple features for R: Standardized support for spatial vector data. *R J* 10, 439.
- Pimentel, D., Zuniga, R., Morrison, D., 2005. Update on the environmental and economic costs associated with alien-invasive species in the United States. *Ecological economics* 52, 273-288.
- Polcar, T., Bondarenko, V., Bezusyj, O., Stejskal, V., Kristan, J., Malinovskyj, O., Imentai, A., Blecha, M., Pylypenko, Y., 2018. Crayfish in central and southern Ukraine with special focus on populations of indigenous crayfish *Astacus pachypus* (Rathke, 1837) and their conservation needs. *Aquatic Conservation: Marine and Freshwater Ecosystems* 28, 6-16.
- Poorbagher, H., Hosseini, S.V., Hosseini, S.M., Aflaki, F., Regenstein, J.M., 2017. Metal accumulation in Caspian sturgeons with different feeding niches, condition factor, body size and age. *Microchemical Journal* 132, 43-48.
- Popa, O.P., Iorgu, E.I., Krapal, A.M., Kelemen, B.S., Murariu, D., Popa, L.O., 2011. Isolation and characterization of the first microsatellite markers for the endangered relict mussel *Hypanis colorata* (Mollusca: Bivalvia: Cardiidae). International journal of molecular sciences 12, 456-461.
- Popa, O.P., Murariu, D., 2009. Freshwater bivalve molluscs invasive in Romania. *Biological Invasions: Towards a Synthesis*. *Neobiota* 8, 123-133.
- Popa, O.P., Sarkany-Kiss, A., Kelemen, B.S., Iorgu, E.I., Murariu, D., Popa, L.O., 2009. Contributions to the knowledge of the present Limnocardiidae fauna (Mollusca: Bivalvia) from Romania. *Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa"* 52, 7-15.
- Prell, C., Hubacek, K., Reed, M., 2009. Stakeholder analysis and social network analysis in natural resource management. *Society and Natural Resources* 22, 501-518.
- Protasov, A., Sylayeva, A., Yarmoshenko, L., Novoselova, T., Primak, A., Savitskiy, A., 2013. Hydrobiological studies on the techno-ecosystem of the Zaporozhye nuclear power station. *Hydrobiological Journal* 49.

## REFERENCES

- Pullin, A.S., Knight, T.M., 2001. Effectiveness in conservation practice: pointers from medicine and public health. *Conservation Biology* 15, 50-54.
- Pullin, A.S., Knight, T.M., Stone, D.A., Charman, K., 2004. Do conservation managers use scientific evidence to support their decision-making? *Biological conservation* 119, 245-252.
- Rahel, F.J., Olden, J.D., 2008. Assessing the effects of climate change on aquatic invasive species. *Conservation Biology* 22, 521-533.
- Reed, M., Fazey, I., Stringer, L., Raymond, C., Akhtar-Schuster, M., Begni, G., Bigas, H., Brehm, S., Briggs, J., Bryce, R., 2013. Knowledge management for land degradation monitoring and assessment: an analysis of contemporary thinking. *Land Degradation & Development* 24, 307-322.
- Reed, M., Stringer, L., Fazey, I., Evely, A., Kruijsen, J., 2014. Five principles for the practice of knowledge exchange in environmental management. *Journal of Environmental Management* 146, 337-345.
- Reed, M.S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C.H., Stringer, L.C., 2009. Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of Environmental Management* 90, 1933-1949.
- Reid, A.J., Carlson, A.K., Creed, I.F., Eliason, E.J., Gell, P.A., Johnson, P.T., Kidd, K.A., MacCormack, T.J., Olden, J.D., Ormerod, S.J., 2019. Emerging threats and persistent conservation challenges for freshwater biodiversity. *Biological Reviews* 94, 849-873.
- Reid, D.F., Orlova, M.I., 2002. Geological and evolutionary underpinnings for the success of Ponto-Caspian species invasions in the Baltic Sea and North American Great Lakes. *Canadian Journal of Fisheries and Aquatic Sciences* 59, 1144-1158.
- Reinartz, R., Bloesch, J., Sandu, C., Suciu, R., Lenhardt, M., Guti, G., Jahrl, J., 2012. Sturgeon conservation in the Danube River Basin: how to implement the Sturgeon Action Plan 2005, In Proc. 39. IAD conf, Szentendre, Hungary. pp. 21-24.
- Ricciardi, A., MacIsaac, H.J., 2000. Recent mass invasion of the North American Great Lakes by Ponto-Caspian species. *Trends in Ecology & Evolution* 15, 62-65.
- Roberge, J.M., Angelstam, P., 2004. Usefulness of the umbrella species concept as a conservation tool. *Conservation Biology* 18, 76-85.
- Romanenko, V., 1987. Priroda Ukrainskoj SSR. Morya i vnutrennie vody. [Nature of the Ukrainian SSR. Seas and inland waters]. Kiev: Naukova dumka, 1-223. [in Russian].
- Rosenberg, G., Ludyanskiy, M.L., 1994. A nomenclatural review of *Dreissena* (Bivalvia: Dreissenidae), with identification of the quagga mussel as *Dreissena bugensis*. *Canadian Journal of Fisheries and Aquatic Sciences* 51, 1474-1484.
- Russev, B.K., 1966. The zoobenthos of Danube River between 845th and 375th river kilometer. I. Diversity, distribution and ecology. *Izv. Zool. Inst. Muz. Sofia* 20, 55-131.
- Russev, B.K., Naidenow, W.T., 1978. Limnology of the Bulgarian part of the Danube section. Sofia, Bulgarian Academy of Sciences, 308 pp. [in Bulgarian].
- Ryan, G.W., Bernard, H.R., 2003. Techniques to identify themes. *Field methods* 15, 85-109.

- Sala, O.E., Chapin, F.S., Armesto, J.J., Berlow, E., Bloomfield, J., Dirzo, R., Huber-Sanwald, E., Huenneke, L.F., Jackson, R.B., Kinzig, A., 2000. Global biodiversity scenarios for the year 2100. *Science* 287, 1770-1774.
- Salafsky, N., Margoluis, R., Redford, K.H., Robinson, J.G., 2002. Improving the practice of conservation: a conceptual framework and research agenda for conservation science. *Conservation Biology* 16, 1469-1479.
- Sands, A.F., Glöer, P., Gürlek, M.E., Albrecht, C., Neubauer, T.A., 2020. A revision of the extant species of *Theodoxus* (Gastropoda, Neritidae) in Asia, with the description of three new species. *Zoosystematics and Evolution* 96, 25-66.
- Sands, A.F., Sereda, S.V., Stelbrink, B., Neubauer, T.A., Lazarev, S., Wilke, T., Albrecht, C., 2019. Contributions of biogeographical functions to species accumulation may change over time in refugial regions. *Journal of Biogeography* 46, 1274-1286.
- Sandström, A., Carlsson, L., 2008. The performance of policy networks: the relation between network structure and network performance. *Policy Studies Journal* 36, 497-524.
- Sandström, A., Rova, C., 2010. Adaptive co-management networks: a comparative analysis of two fishery conservation areas in Sweden. *Ecology and Society* 15.
- Scarlato, O., Starobogatov, Y.I., 1972a. Class Bivalvia. Guide for identification of the fauna of the Black and Azov Seas. Vol. 3. Freeliving invertebrates. Arthropods (other than crustaceans), mollusks, echinodermatans, chaetognathans, chordatans, 178-270.
- Scarlato, O.A., Starobogatov, Y.I., 1972b. Class Bivalvia. Guide for identification of the fauna of the Black and Azov Seas. Vol. 3. Free-living invertebrates. Arthropods (other than crustaceans), mollusks, echinodermatans, chaetognathans, chordatans, 178-270.
- Schmutz, S., Sendzimir, J., 2018. Riverine Ecosystem Management: Science for Governing Towards a Sustainable Future. Springer Nature.
- Scott, J., 1991. Social network analysis: A handbook.
- Semenchenko, V., Son, M., Novitsky, R.A., Kvach, Y., Panov, V.E., 2016. Checklist of non-native benthic macroinvertebrates and fish in the Dnieper River basin. *BioInvasions Records* 5, 185–187.
- Semenchenko, V.P., Son, M.O., Novitsky, R.A., Kvatch, Y.V., Panov, V.E., 2015. Alien macroinvertebrates and fish in the Dnieper River basin. *Russian Journal of Biological Invasions* 6, 51-64.
- Shannon, C.E., Weaver, W., 1949. The mathematical theory of communication. Urbana, IL: University of Illinois Press.
- Shatova, O., Khmara, T., Slepchuk, K., Yastreb, V., 2009. Interannual variability of salinity in the Dnieper-Bug estuary. *Ekologicheskaja Bezopasnost' Pribrezhnoj I Shel'fovoj Zon i Kompleksnoe Ispol'zovanie Resursov Shel'fa* 20, 185-194. [in Russian].
- Shevtsova, L., 2000. Hydrobiological research of the Dniester: results, problems and Ways of their solving. *Hydrobiological Journal* 36.
- Shiganova, T., 2011. Pontocaspian invasion, In Encyclopedia of Biological Invasions. ed. M.R. Daniel Simberloff, pp. 549-557. University of California Press.
- Shokhin, I.V., Nabozhenko, M.V., Sarvilina, S.V., Titova, E.P., 2006. The present-day condition and regularities of the distribution of the bottom communities in Taganrog Bay. *Oceanology* 46, 401-410.

## REFERENCES

- Simonov, A., Altman, E., 1991. Hydrometeorology and Hydrochemistry of the USSR seas. Vol. IV. The Black Sea. Gidrometeoizdat, Moscow.
- Singh, J., 1999. Study on the development of transboundary natural resource management areas in Southern Africa: global review; lessons learned. Biodiversity Support Program, Washington, DC (EUA).
- Sitnikova, T.Y., Starobogatov, Y.I., 1999. A new genus of the family Pyrgulidae (Gastropoda, Pectinibranchia) from the fresh water Azov-Black Sea Basin (Related to the problem on Ponto-Caspian species). Зоологический журнал 78.
- Skjærseth, J.B., Wettestad, J., 2002. Understanding the effectiveness of EU environmental policy: how can regime analysis contribute? Environmental Politics 11, 99-120.
- Son, M.O., 2007a. Invasive molluscs in fresh and brackish waters of the Northern Black Sea Region. Druk, Odessa, 1-131.
- Son, M.O., 2007b. Native range of the zebra mussel and quagga mussel and new data on their invasions within the Ponto-Caspian Region. Aquatic Invasions 2, 174-184.
- Son, M.O., 2008. Rapid expansion of the New Zealand mud snail *Potamopyrgus antipodarum* (Gray, 1843) in the Azov-Black Sea Region. Aquatic Invasions 3, 335-340.
- Son, M.O., 2011a. *Caspia gmelinii*. The IUCN Red List of Threatened Species 2011: e.T155474A4782113. <http://dx.doi.org/10.2305/IUCN.UK.2011-1.RLTS.T155474A4782113.en>. [accessed on 05 December 2018].
- Son, M.O., 2011b. *Caspia knipowitschi*. The IUCN Red List of Threatened Species 2011: e.T156116A4900657. <http://dx.doi.org/10.2305/IUCN.UK.2011-1.RLTS.T156116A4900657.en>. [accessed on 05 December 2018].
- Son, M.O., 2011c. *Caspia makarovi*. The IUCN Red List of Threatened Species 2011: e.T155680A4822960. <http://dx.doi.org/10.2305/IUCN.UK.2011-1.RLTS.T155680A4822960.en>. [accessed on 05 December 2018].
- Son, M.O., 2011d. *Turricaspia chersonica*. The IUCN Red List of Threatened Species 2011: e.T155738A4835520. <http://dx.doi.org/10.2305/IUCN.UK.2011-1.RLTS.T155738A4835520.en>. Downloaded on 05 December 2018.
- Son, M.O., 2011e. *Turricaspia ismailensis*. The IUCN Red List of Threatened Species 2011: e.T155600A4806726. <http://dx.doi.org/10.2305/IUCN.UK.2011-1.RLTS.T155600A4806726.en>. [accessed on 05 December 2018].
- Son, M.O., 2011f. *Turricaspia lincta*. The IUCN Red List of Threatened Species 2011: e.T155627A4811075. <http://dx.doi.org/10.2305/IUCN.UK.2011-1.RLTS.T155627A4811075.en>. [accessed on 05 December 2018].
- Son, M.O., Cioboiu, O., 2011. *Turricaspia ismailensis*. Te IUCN Red List of Threatened Species 2011:e.T155600A4806726. <https://doi.org/10.2305/IUCN.UK.2011-1.RLTS.T155600A4806726.en> [Accessed on 05 December 2018].
- Son, M.O., Novitsky, R.A., Dyadichko, V.G., 2013. Recent state and mechanisms of invasions of exotic Decapods in Ukrainian rivers. Vestnik zoologii 47, 59-64.
- Son, M.O., Prokin, A.A., Dubov, P.G., Konopacka, A., Grabowski, M., MacNeil, C., Panov, V.E., 2020. Caspian invaders vs. Ponto-Caspian locals – range expansion of invasive macroinvertebrates from the Volga Basin results in high biological pollution of the Lower Don River. Management of Biological Invasions 11, 178-200.
- Sowinsky, V.K., 1904. An introduction to the study of the fauna of the Ponto-Caspian-Aral marine basin, considered as independent zoogeographical province. Zapiski Kievskogo obschestva estestvoispytatelej 18, 1-487. [in Russian].

- Stanica, A., Dan, S., Ungureanu, V.G., 2007. Coastal changes at the Sulina mouth of the Danube River as a result of human activities. *Marine pollution bulletin* 55, 555-563.
- Stark, I., 1960. Bentos Taganrogskogo zaliva. [Benthos of the Taganrog Bay] Trudy Azovskogo Nauchno-Issledovatel'skogo Instituta Rybnogo Khozyaystva (AZNIIRKH) 1, 210-216. [in Russian].
- Starobogatov, Y.I., 1970. Molluscan fauna and zoogeographical division of the continental waterbodies of the globe. Nauka, Leningrad.
- Stoica, C., Gheorghe, S., Petre, J., Lucaciu, I., Nita-Lazar, M., 2014. Tools for assessing Danube Delta systems with macro invertebrates. *Environmental Engineering & Management Journal (EEMJ)* 13.
- Stoica, C., Lucaciu, I., Nicolau, M., Vosniakos, F., 2012. Monitoring the ecological diversity of the aquatic Danube Delta systems in terms of spatial-temporal relationship.
- Stoica, C., Stanescu, E., Lucaciu, I., Gheorghe, S., Nicolau, M., 2013. Influence of global change on biological assemblages in the Danube Delta.
- Stork, D., Richards, W.D., 1992. Nonrespondents in communication network studies: Problems and possibilities. *Group & Organization Management* 17, 193-209.
- Strat, D., Mihăilescu, S., Sandu, C.S., Sahlean, T.C., 2017. Conservation status of species and habitats of community importance on the Romanian Black Sea coast, In Sabotinov N.(Ed-in-Chief), Book of Abstracts, First European Symposium Research, conservation and management of biodiversity in the European seashores-RCMBES. p. 69.
- Stringer, L.C., Dougill, A.J., 2013. Channelling science into policy: Enabling best practices from research on land degradation and sustainable land management in dryland Africa. *Journal of Environmental Management* 114, 328-335.
- Stringer, L.C., Paavola, J., 2013. Participation in environmental conservation and protected area management in Romania: a review of three case studies. *Environmental Conservation* 40, 138-146.
- Sutherland, W.J., Pullin, A.S., Dolman, P.M., Knight, T.M., 2004. The need for evidence-based conservation. *Trends in Ecology & Evolution* 19, 305-308.
- Syomin, V., Kolyuchkina, G., Grigorenko, K., Savikin, A., Oleinikov, E., Moskovets, A., Glebova, M., 2020. Changes in the bottom fauna of the Sea of Azov under the conditions of abnormal salinization, In Proceedings of the VIII International Scientific and Practical Conference "Marine Research and Education (MARESEDU-2019)" Volume II (III): [collection]. Tver: LLC "PolyPRESS", pp. 490-493.
- Syomin, V., Sikorski, A., Bastrop, R., Köhler, N., Stradomsky, B., Fomina, E., Matishov, D., 2017. The invasion of the genus *Marenzelleria* (Polychaeta: Spionidae) into the Don River mouth and the Taganrog Bay: morphological and genetic study. *Journal of the Marine Biological Association of the United Kingdom* 97, 975-984.
- Szarek-Mason, P., 2010. The European Union's fight against corruption: the evolving policy towards Member States and candidate countries. Cambridge University Press.
- Teampău, P., 2020. Trouble in paradise: Competing discourses and complex governance in the Romanian danube delta. *Marine Policy* 112, 103522.
- Teodorescu-Leonte, R., 1966. Rezultatele Cercetărilor asupra bazei trofice a complexului Razelm și perspectivele producției piscicole din acest complex prin dirijarea popularii. *Bul. Inst. Cerc. Project. Piscicole* 25, 38-47.

- Teodorescu-Leonte, R., 1977. Le complexe Razelm–Sinoie un sistem typiquement saumatre. MAMBO Constanta. In „Biologie des eauxsaumatre de la Mer Noire”, 213-234.
- Teodorescu-Leonte, R., Leonte, V., 1969. Variation des biocenoses benthiques du Complexe Razelm, en fonction des conditions de salinité, In Rapports de la Commission Internationale pour l'Étude Scientifique de la Mer Méditerranée. CIESM, Monaco 19 (5).
- Teodorescu-Leonte, R., Leonte, V., Dumitru, M., Soileanu, B., 1956. Observations on the Razelm–Sinoie complex during 1950–1952. The Annals of the Romanian Research Institute of Fisheries 1, 1-50.
- The Government of Romania, 2014. National strategy and Action plan for biodiversity conservation, Romania.
- The World Bank study team, 2014. Draft Danube Delta Integrated Sustainable Development Strategy (2030), Report 2.2.
- The World Bank study team, 2015. Report on Strategic Environmental Assessment in Danube Delta.
- Theriault, T.W., Docker, M.F., Orlova, M.I., Heath, D.D., MacIsaac, H.J., 2004. Molecular resolution of the family Dreissenidae (Mollusca: Bivalvia) with emphasis on Ponto-Caspian species, including first report of *Mytilopsis leucophaeata* in the Black Sea basin. Molecular phylogenetics and evolution 30, 479-489.
- Trichkova, T., 2007. Zoobenthos of non-lotic Bulgarian wetlands. Pp. 185–195. In: Michev, T., & Stoyneva, M. (Eds.), Inventory of Bulgarian Wetlands and their Biodiversity. Part 1: Non-Lotic Wetlands. Sofia: Publishing House Elsi-M, 364 pp.
- Trichkova, T., Todorov, M., Georgiev, D., Hubenov, Z., 2019. Species composition and distribution of Mollusca (Gastropoda and Bivalvia) in the Bulgarian Sector of the Danube River and the adjacent wetlands. Chapter 2. Pp. 29–71. In: Shurulinkov, P. S., Hubenov, Z., Beshkov, S., & Popgeorgiev, G. (Eds.), Biodiversity of the Bulgarian-Romanian Section of the Lower Danube. New York: Nova Science Publishers.
- Tudor, M.-I., Tudor, M., David, C., Teodorof, L., Tudor, D., Ibram, O., 2006. Heavy metals concentrations in aquatic environment and living organisms in the Danube Delta, Romania, In Chemicals as Intentional and Accidental Global Environmental Threats. pp. 435-442. Springer.
- UNECE, U.N.E.C.f.E., 1991. Convention on Environmental Impact Assessment in a Transboundary Context. U.N.T.S. vol. 1989, p. 309. UNECE Geneva.
- UNESCO, 1971. Convention on Wetlands of International Importance Especially as Waterfowl Habitat. U.N.T.S. vol. 996, p. 245.
- UNESCO, 1972. Convention for the Protection of the World Cultural and Natural Heritage. U.N.T.S. vol. 1037.
- Vadineanu, A., Cristofor, S., Ignat, G., Ciubuc, C., Rîșnoveanu, G., Bodescu, F., Botnariuc, N., 2000. Structural and functional changes within the benthic communities of Danube Delta lakes. Internationale Vereinigung für theoretische und angewandte Limnologie: Verhandlungen 27, 2571-2576.
- Valkanov, A., 1941. Our coastal lakes and marshes in Dobrudzha. Fishery Review [Ribarski Pregled] 6. [in Bulgarian].
- Valkanov, A., 1957a. Katalog unserer Schwarzmeerfauna. Arbeiten aus der Biologischen Meeresstation in Varna 19, 1–62. [in Bulgarian].
- Valkanov, A., 1957b. Katalog unserer Schwarzmeerfauna. Arbeiten aus der Biologischen Meeresstation in Varna, Bulgarien, 19: 1-62. 19, 1-62. [in Bulgarian, German summary].

- Varbanov, M., 2002. Lakes and marshes. Pp. 237–242. In: Kopralev, I., Yordanova, M., & Mladenov, C. (Eds.), *Geography of Bulgaria. Physical Geography. Socio-Economic Geography*. Sofia: ForCom Publishing House, 760 pp.
- Varnosfaderany, M.N., Bakhtiari, A.R., Gu, Z., Chu, G., 2015. Distribution and characteristic of PAHs in sediments from the southwest Caspian Sea, Guilan Province, Iran. *Water Science and Technology* 71, 1587-1596.
- Vasile, V., 2013. Romania: A country under permanent public sector reform. *Public Sector Shock*, 449.
- Vassilev, M., 2006. Lower Danube—the last refuge for surviving of sturgeon fishes in the Black Sea Region, In *Water Observation and Information System for Decision Support. Conference Proceedings*, Balwois, Ohrid, Macedonia [http://balwois.org—Accessed on 15th April 2009].
- Velde, S.v.d., Jorissen, E.L., Neubauer, T.A., Radan, S., Pavel, A.B., Stoica, M., Van Baak, C.G., Martínez Gándara, A., Popa, L., Stigter, H.d., 2019. A conservation palaeobiological approach to assess faunal response of threatened biota under natural and anthropogenic environmental change. *Biogeosciences* 16, 2423-2442.
- Verissimo, D., MacMillan, D.C., Smith, R.J., 2011. Toward a systematic approach for identifying conservation flagships. *Conservation Letters* 4, 1-8.
- Vidinova, Y., Tyufekchieva, V., Varadinova, E., Stoichev, S., Kenderov, L., Dedov, I., Uzunov, Y., 2016. Taxonomic list of benthic macroinvertebrate communities of inland standing water bodies in Bulgaria. *Acta zoologica bulgarica* 68, 147-158.
- Vinogradov, A.K., Bogatova, Y.I., Sinegub, I.A., 2014. Ecology of the sea ports (Black Sea and Azov Sea basin). Astroprint, Odessa, 568 pp.
- Vishnevetskiy, V., Popruzhniy, V., 2018. Some features of the ecological situation of The Miussky estuary. *Engineering Journal of Don* 4.
- Visseren-Hamakers, I.J., 2015. Integrative environmental governance: enhancing governance in the era of synergies. *Current Opinion in Environmental Sustainability* 14, 136-143.
- Visseren-Hamakers, I.J., 2018. Integrative Governance: The relationships between governance instruments taking center stage. SAGE Publications Sage UK: London, England.
- Vitousek, P., 1997. Human domination of earth ecosystems (vol 277, Pg 494, 1997). *Science* 278, 21-21.
- Vorob'yev, V.P., 1949. Benthos of the Sea of Azov. *Proceedings of the Azov-Black Sea Institute of Marine Fisheries and Oceanography* 13, 1-196.
- Waldron, A., Mooers, A.O., Miller, D.C., Nibbelink, N., Redding, D., Kuhn, T.S., Roberts, J.T., Gittleman, J.L., 2013. Targeting global conservation funding to limit immediate biodiversity declines. *Proceedings of the National Academy of Sciences* 110, 12144-12148.
- Wasserman, S., Faust, K., 1994. Social network analysis: Methods and applications. Cambridge university press.
- Weimann, G., 1982. On the importance of marginality: One more step into the two-step flow of communication. *American Sociological Review*, 764-773.
- Wesselingh, F., Gogaladze, A., van Impelen, C., Raes, N., 2016. PRIDE Outreach Policy Plan. Naturalis Biodiversity Center, Leiden, the Netherlands.
- Wesselingh, F.P., Neubauer, T.A., Anistratenko, V.V., Vinarski, M.V., Yanina, T., ter Poorten, J.J., Kijashko, P., Albrecht, C., Anistratenko, O.Y., D'Hont, A., Frolov, P., Gandara, A.M., Gittenberger, A., Gogaladze, A., Karpinsky, M.,

## REFERENCES

- Lattuada, M., Popa, L., Sands, A.F., Velde, S.v.d., Vandendorpe, J., Wilke, T., 2019. Mollusc species from the Pontocaspian region – an expert opinion list. *ZooKeys* 827, 31-124.
- Wesseling, A., Paavola, J., Fritsch, O., Renn, O., 2011. Rationales for public participation in environmental policy and governance: practitioners' perspectives. *Environment and Planning A* 43, 2688-2704.
- Wilke, T., Albrecht, C., Anistratenko, V.V., Şahin, S.K., Yıldırım, M.Z., 2007. Testing biogeographical hypotheses in space and time: faunal relationships of the putative ancient Lake Egirdir in Asia Minor. *Journal of Biogeography* 34, 1807-1821.
- Wohlberedt, O., 1911. Zur Molluskenfauna von Bulgarien. *Abhandlungen der Naturforschenden Gesellschaft zu Gorlitz* 27, 167-234.
- World Economic Forum, 2020. The Global Risks Report, ed. 15.
- WWF, 2007. Danube Delta: a natural gateway to Europe Ecology and Economy in Harmony, ed. D.-C.P. WWF International, Vienna.
- WWF, 2020. Living Planet Report 2020 - Bending the curve of biodiversity loss. Almond, R.E.A., Grooten M. and Petersen, T. (Eds). WWF, Gland, Switzerland.
- Yamaki, K., 2017. Applying social network analysis to stakeholder analysis in Japan's natural resource governance: two endangered species conservation activity cases. *Journal of Forest Research* 22, 83-90.
- Zakonnov, V., Timchenko, V., Zakonnova, A., 2019. Silt Accumulation in Large Plain Reservoirs. *Hydrobiological Journal* 55, 93-102.
- Zenkevitch, L., 1963. Biology of the Seas of the USSR. New York: Interscience Publishers.
- Zhadin, V., 1931. Die Mollusken des Bassins des südlichen Bugs. *Trudy Prirodno-Technicnogo Viddilu* 13, 13–53.
- Zhadin, V., 1952. Mollyuski presnykh i solonovatlykh vod SSSR. Izdatel'stvo Akademii Nauk SSSR, Moskva, Leningrad, 376 pp.
- Zhidkova, A.Y., Gusakova, N.V., Petrov, V.V., 2018. The Research of Waters Eutrophication of the Gulf of Taganrog of the Sea of Azov For Ecological Monitoring Purposes. *Exploration and Monitoring of the Continental Shelf Underwater Environment* 235, 235.
- Zhivoglyadova, L., Revkov, N., Kovalev, E., 2018. Extension of the bivalve *Corbicula fluminea* (O. F. Müller, 1774) areal in the Lower Don river system. *Marine Biological Journal* 3, 73-75. [in Russian].
- Zhivoglyadova, L.A., Frolenko, L.N., 2017. Kharakteristika kormovoї bazi rib-bentofagov nijnego Dona [Characteristics of the food supply for benthophagous fish in the Lower Don]. *Izvestiya TINRO* (Transactions of the Pacific Research Institute of Fisheries and Oceanography) 189. [in Russian].
- Zhulidov, A.V., Kozhara, A.V., van der Velde, G., Leuven, R.S., Son, M.O., Gurtovaya, T.Y., Zhulidov, D.A., Nalepa, T.F., 2018. Status of the invasive brackish water bivalve *Mytilopsis leucophaeata* (Conrad, 1831)(Dreissenidae) in the Ponto-Caspian region. *BioInvasions Records* 7, 111–120.
- Zhulidov, A.V., Kozhara, A.V., van der Velde, G., Leuven, R.S., Zhulidov, D.A., Gurtovaya, T.Y., Nalepa, T.F., Santiago-Fandino, V.J., 2015. New records from the Ponto-Azov region demonstrate the invasive potential of *Mytilopsis leucophaeata* (Conrad, 1831)(Bivalvia: Dreissenidae). *Journal of Molluscan Studies* 81, 412-416.





Mai bine haimana,  
decât trăchi  
Mai bine huligan,  
decât dictator  
Mai bine golan,  
decât activist  
Mai bine mort,  
decât **comunist**

