### I. PLANNED ACTIVITIES

In September 2018, the Department of Ecology and Engineering of Nizhnevartovsk State University launched the project "Promoting biodiversity conservation in RF via advanced EU practice", 600034-EPP-1-2018-1-RU-EPPJMO-PROJECT.

- 1. Summer School "Advanced EU practices in biodiversity assessment and conservation":
- Lectures, seminars, brainstorming games held by Russian and European teachers and researchers of biodiversity (theoretical part of the summer school).
- Field work, practical sessions for students to assess biodiversity in Khanty-Mansiysk Autonomous Area – Yugra (area affected by oil and gas development) using the EU biodiversity assessment practices.
- Student research of biodiversity in Khanty-Mansiysk Autonomous Area Yugra using EU experience.
- Tours to the related facilities (environmental units of oil and gas companies, municipal environmental protection departments).
- Publication of research and study aids "Using EU Methods for Enhanced Biodiversity
   Assessment and Conservation in Khanty-Mansiysk Autonomous Area Yugra", "A
   Study Guide to Biodiversity Assessment", "Biodiversity Assessment Methods: Best EU
   Practices".
- Presentation of student research projects (developed during the summer school).
- 2. The first stage of the project was summed up during the Session "Strategies of Biodiversity Conservation in the European Union and Russia: Best Practices and Cooperation Prospects" held at the Final International Conference "Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University".

## II. DESCRIPTION OF IMPLEMENTED ACTIVITIES

## 1) Awareness-raising seminar devoted to the launch of the Jean Monnet project in NVSU.

Assembly Hall, 11 Dzerzhinskogo st., Building 4, NVSU (October 12, 2018)

Presentation of the project, including project aim, objectives, implementation stages, planned activities, dissemination. The session was attended by NVSU teachers, master and bachelor students of the Faculty of Ecology and Engineering, members of professional community in the field of ecology and environmental management in Nizhnevartovsk, <u>85 participants</u> in total.

# 2) Development and launch of the project web-page at NVSU Erasmus + portal in Russian and English

http://erasmus.nvsu.ru/jean\_monnet/projects/project6

### 3) Visits

On *November 29, 2018*, the project coordinator Tatiana Storchak took part in the working session and official launch of Jean Monnet-2018.

The meeting was attended by representatives of projects selected as part of the call for proposals (EAC / A05 / 2017), representatives of the Executive Agency for Education,

Проект Жан Монне "Применение передовых европейских практик по оценке и сохранению биоразнообразия в России" (Jean Monnet Project"Promoting biodiversity conservation in RF via advanced EU practices"), № 600034-EPP-1-2018-1-RU-EPPJMO-PROJECT

Координаторы: Т.В. Сторчак, И.А. Погонышева

Audiovisual Media and Culture (EACEA) and members of the European Commission. Jean Monnet project team of the Executive Agency held information sessions and answered numerous questions on the operational and financial aspects of the projects. At the meeting, various project teams from Russia and other countries shared their experiences on the project subjects, implementation and discussed cooperation prospects.

According to the implementation plan, *on February 25-March 3*, the project team went on a study visit to a European partner university to study the project related experience and practices. During the study visit, the project coordinator, assisted by Professor of the University of Barcelona, Head of the Department of Ecology Dr. Francesc Sabater Comas,

	studied the structure of the university and the specifics of the educational process;	
	studied the teaching and tutorial support of courses in biology and ecology;	
	consulted with members of the faculty on the best European practices in biodiversity	
conservation.		

During the visit to the Blanes Center for Advanced Studies (Blanes, Spain), the project team had a meeting with one of project experts, Dr. Esperança Gacia Passola and learned the specifics of center's field activities during the summer period and agreed upon joint webinars for NVSU students.

A visit to Jardin Botanico Marimurtra in Blanes, one of the oldest and richest botanic gardens in the Mediterranian Europe provided an opportunity to learn about its environmental and recreational activities.

Assisted by the Director of the Institute for Aquatic Ecology, University of Girona, Dr. Frederic Guich, the project coordinator held a seminar, presented NVSU activities within Jean Monnet program and discussed the possibilities for cooperation between NVSU and the University of Girona.

# 4) International Photography contest "Biodiversity through the Lens"

Main objective: raise awareness of biodiversity conservation in regions affected by high anthropogenic pressure in the EU countries and Russia (Khanty-Mansiysk Autonomous Area – Yugra)

The contest included 45 photographs in the categories: European Biodiversity, Biodiversity in Khanty-Mansiysk Autonomous Area-Ugra, Landscapes in Europe and Khanty-Mansiysk Autonomous Area-Yugra.

## 5) Interactive game "UNESCO World Natural Heritage"

The game was held on April 18, 2019 in NVSU Main Building and was joined by three teams of high school students from Nizhnevartovsk schools and their support groups (74 participants in total). The game inleduded an interactive presentation of UNESCO World Heritage Sites in Russia.

# 6) Online student survey to test the knowledge of "Biosphere reserves" and "Specially protected natural territories of Khanty-Mansiysk Autonomous Area-Yugra"

The survey involved 112 respondents, mainly students aged 18-25. According to the survey results, the respondents are aware of the EU biodiversity acts and conservation activities, and are interested in the EU activities in the protected natural areas. At the same time, the survey showed low awareness of nature reserves and protected areas both in the EU and Khanty-Mansiysk Autonomous Area. This information, presented in the media, is of much interest and relevance to the surveyed public.

Dissemination of knowledge, experience, reports and presentations posted on the university's website and events wihin the project can become an important component of disseminating knowledge on biodiversity conservation in the EU and Khanty-Mansiysk.

Survey on the summer school.

# 7) Seminar "UNESCO World Natural Heritage in Russia and the European Union"

NVSU held the Seminar "UNESCO World Natural Heritage in Russia and the European Union" on *February 20, 2019*.

The seminar was attended by university teachers, bachelor, master and postgraduate students of NVSU Faculty of Ecology and Engineering, as well as experts in ecology and environmental management and representatives of environmental authorities of Nizhnevartovsk and Nizhnevartovsk area (40 participants).

The seminar included interactive presentations of UNESCO World Heritage sites in the EU countries and in Russia broadcast during the week of science on February 11-16 on the university's promotion screens.

### 8) Master class

On May 22, 2019, NVSU held a meeting with Yuri Ippolitov, a traveler, a naturalist photographer and a blogger (11 Dzerzhinskogo St., Room 411), attended by 75 participants.

For a biologist and environmental researcher, clear presentation of the data is essential. Thus, photography is a great visual material for exploring the flora and fauna, landscapes of different natural zones and territories. Naturalist photographers travel and take pictires of nature, and such photographs are often documentary evidence of biodiversity, as well as an important aspect for understanding the beauty of wildlife, motivating a careful attitude towards it.

At his master class, Yuri Ippolitov spoke about his work, activities at Sibirskiye Uvaly Nature Park, expeditions to protected areas, and interesting experience.

## 9) A series of seminars (webinars) with members of the EU universities

The webinars were to raise awareness of the European biodiversity conservation practices among NVSU students and teachers and to demonstrate different approaches to biodiversity assessment and conservation in the EU, including best practices and educational activities of universities in the field of biodiversity.

April 18, 2019, Assembly Hall, 11 Dzerzhinskogo st., Building 4, NVSU

Cesc Múrria, Ajunct Professor, Department of Evolutionary Biology, University of Barcelona, Spain

Webinar on "New genomic tools for assessing the ecological status of rivers, and its application in eu water bodies"

50 participants.

April 18, 2019, Assembly Hall, 11 Dzerzhinskogo st., Building 4, NVSU

Atena Groza, Advisor to the National Agency of Protected Areas, leading expert in biodiversity, DAKIA Association of Sustainable Development (Romania).

Webinar on "Biodiversity conservation in the European Union"

50 participants.

May 24, 2019, Assembly Hall, 11 Dzerzhinskogo st., Building 4, NVSU

Enric Ballesteros, Esperança Gacia, The Blanes Centre for Advanced Studies, CEAB-CSIC, Spain

Webinar on: "European directives for the conservation of biodiversity and environment with focus on marine ecosystems"

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# 50 participants.

May 29, 2019, Assembly Hall, 11 Dzerzhinskogo st., Building 4, NVSU

Dr.Grégoire Dibois, a project leader at the Joint Research Centre (JRC) – the science and knowledge service of the European Commission, Belgium.

Dr. Ole Ostermann, a policy co-ordinator at the Joint Research Centre (JRC) – the science and knowledge service of the European Commission, Belgium.

Webinar on: "Introduction to the EU biodiversity strategy. Joint Research Centre of the European Commission".

50 participants.

## 10) Conferences and seminars

On April 15-19, NVSU held the Final Research and Practical Conference "Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University". The Conference included the Panel Session "Strategies of Biodiversity Conservation in the European Union and Russia: Best Practices and Cooperation Prospects" organized within Jean Monnet Project "Promoting biodiversity conservation in RF via advanced EU practices".

Held with the view to summarize and transmit the results of Jean Monnet projects implemented at Nizhnevartovsk State University, the conference was aimed at boosting up knowledge about the European integration and the issues of the EU environment, history, economics and legislation.

The key issues of the Session were discussed by Russian and foreign experts in biodiversity conservation, university professors, students, graduate students, members of local administration, members of the academic and professional community.

Keynote speakers and moderators included:

Atena Groza, Advisor to the National Agency of Protected Areas, leading expert in biodiversity, DAKIA Association of Sustainable Development (Romania).

Grégoire Dubois, Project Leader in biodiversity conservation at Joint Research Centre, Science and Knowledge Service (European Commission).

Ole Ostermann, Policy Coordinator, Joint Research Centre, Science and Knowledge Service (European Commission).

Cesc Múrria, Adjunct Professor, Department of Evolutionary Biology, Ecology and Environmental Science, University of Barcelona (Spain).

Tatiana Storchak, Candidate of Biological Sciences, Associate Professor at the Department for Ecology, and Irina Pogonysheva, Candidate of Biological Sciences, Associate Professor at the Department for Ecology, both co-ordinators of Jean Monnet Project "Promoting biodiversity conservation in Russian Federation via advanced EU practices" \.

The Panel Session "Strategies of Biodiversity Conservation in the European Union and Russia: Best Practices and Cooperation Prospects" was devoted to discussions of the following issues:

- 1. Biodiversity conservation and use: economic, social and legal aspects.
- 2. Theoretical and methodological aspects of biodiversity conservation in the EU, Russia and Khanty-Mansiysk Autonomous Area-Yugra: challenges and prospects.
  - 3. International cooperation in biodiversity monitoring.
  - 4. Climate change: identified and projected impacts on biodiversity and ecosystems.
- 5. Human role in controlling biodiversity. The EU experience in managing knowledge and data in biodiversity monitoring.

6. Problems and prospects of protected natural areas in the EU, Russia and Khanty-Mansiysk Autonomous Area-Yugra.

The session also involved summing up Jean Monnet Module "Promoting biodiversity conservation in Russian Federation via advanced EU practices" and discussing key advanced practices of the EU countries in the field of biodiversity conservation and the ways to apply them in the regions exposed to the increasing anthropogenic load, such as Khanty-Mansyisk Autonomous Area-Yugra in Russia.

More than 50 people attended the Session, including 7 contributors.

The conference was followed by a collection of papers and reports published online in the electronic library, official website of Nizhnevartovsk State University, and at the Erasmus + web-portal at Nizhnevartovsk State University

The participants discussed and approved the resolution on the Session "Strategies of Biodiversity Conservation in the European Union and Russia: Best Practices and Cooperation Prospects" at the Final International Research and Practical Conference "Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University". Conference participants pointed to the positive conference results in terms of expanding international and interdisciplinary cooperation.

The conference was concluded with an external monitoring of projects made by Paivi Korhonen, CEO of PDGE (Project Development Group Europe), who interviewed the project coordinators and analyzed the qualitative and quantitative results.

# 11) Summer school June 24 – July 06, 2019 "Advanced EU practices in biodiversity assessment and conservation"

The summer school is **aimed at** studying the best EU practices and approaches to the biodiversity assessment and conservation; developing professional skills and competitiveness of students; promoting research in the field of biodiversity conservation based on the EU scientific achievements; strengthening cooperation between Russian and European researchers; raising public awareness of EU actions to conserve biodiversity; discussing the applicability of best European practices in the field of biodiversity assessment and conservation in Russia.

*Duration* – 12 days, *June* 24 – *July* 05, 2019

The school included group student research monitored by experts university teachers at research and field study site of Nizhnevartovsk State University, Yugra Museum, Ethnographic and Ecological Park (Megion), and Sibirskiye Uvaly Natural Park.

The school also included interactive classes designed to familiarize the participants with the modern requirements for field research and methods for assessing and maintaining biodiversity in the European Union.

# 12) Teaching aids for the Summer School "Advanced EU practices in biodiversity assessment and conservation", including A Study Guide to Biodiversity Assessment.

Teaching aids include:

- Detailed programme of the summer school
- Assessment tools (tests, questionnaires, documents)
- Web-site links and resources

All the materials are designed in Moodle software (open-source distance learning media) on the official web-site of Nizhnevartovsk State University and are available to the general public.

http://sdo.nggu.ru/course/view.php?id=17949

The team has developed a Guide to Biodiversity Assessment and a Collection of the EU Biodiversity Assessment Practices. The Guide will provide background information on biodiversity assessment objectives and planning, lists and explanations of biodiversity assessment methodology, namely best EU practices for biodiversity assessment. The methods described in the Guide can be applied for biodiversity monitoring in the area affected by oil and gas development, such as Khanty-Mansiysk Autonomous Area – Yugra.

### 13) Research

## Project-related papers published by project coordinators:

Storchak T.V., Pogonysheva I.A., Didenko I.N. Applying EU practices for biodiversity assessment and conservation in Khanty-Mansiysk Autonomous Area – Yugra. In: Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University: Proceedings of the International Research and Practice Conference (Nizhnevartovsk, April 15-19, 2019). Nizhnevartovsk: Nizhnevartovsky gosudarstvenniy universitet Publ., 2019, pp. 42-48. (In Russian).

## Project-related studies and papers published by <u>master and postgraduate students</u>:

*Burzhumova E.Z.* Trophic activities of the greater spotted woodpecjer Denrocopos Major and its medium-shaping role in the Middle Ob River Area. In: Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University: Proceedings of the International Research and Practice Conference (Nizhnevartovsk, April 15-19, 2019). Nizhnevartovsk: Nizhnevartovsky gosudarstvenniy universitet Publ., 2019, pp. 8–13. (In Russian).

*Volkov I.V., Skorobogatova O.N.* Green algae in welands of the Aganskoye and Novo-Pokursjoye oil and gas deposits. In: Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University: Proceedings of the International Research and Practice Conference (Nizhnevartovsk, April 15-19, 2019). Nizhnevartovsk: Nizhnevartovsky gosudarstvenniy universitet Publ., 2019, pp. 13–18. (In Russian).

Didenko I.N., Didenko N.A. Ecologic monitoring as a factor of biodiversity conservation during oil production. In: Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University: Proceedings of the International Research and Practice Conference (Nizhnevartovsk, April 15-19, 2019). Nizhnevartovsk: Nizhnevartovsky gosudarstvenniy universitet Publ., 2019, pp. 18–20. (In Russian).

Sitnikova N.V. Comparing the system of specially protected natural areas of Khanty-Mansiysk Autonomous Area-Yugra and Finland. In: Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University: Proceedings of the International Research and Practice Conference (Nizhnevartovsk, April 15-19, 2019). Nizhnevartovsk: Nizhnevartovsky gosudarstvenniy universitet Publ., 2019, pp. 26–30. (In Russian).

Skorobogatova O.N., Izguzhina R.R. Introduction of alien species as a factorleading to loss of biodiversity. In: Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University: Proceedings of the International Research and Practice Conference (Nizhnevartovsk, April 15-19, 2019).

Nizhnevartovsk: Nizhnevartovsky gosudarstvenniy universitet Publ., 2019, pp. 30–33. (In Russian).

Skorobogatova O.N., Moskaleva A.S. New data on phytoplankton of the Vakh River. In: Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University: Proceedings of the International Research and Practice Conference (Nizhnevartovsk, April 15-19, 2019). Nizhnevartovsk: Nizhnevartovsky gosudarstvenniy universitet Publ., 2019, pp. 33–42. (In Russian).

#### III. PUBLISHED PAPERS

- 1. Pogonysheva I.A., Storchak, T.V. EU biodiversity conservation policy. In: Interaction of environment and human health: experience of the European Union. Nizhnevartovsk, Izdatelskii tsentr Nauka i praktika Publ., 2018, pp. 47-51. (In Russian).
- 2. Pogonyshev D.A., Pogonysheva I.A., Storchak, T.V. The system of protection of naturer areas and preservation of the biodiversity in the European Union countries (state-of-the-art review). In: Interaction of environment and human health: experience of the European Union. Nizhnevartovsk, Izdatelskii tsentr Nauka i praktika Publ., 2018, pp. 84-91. (In Russian).
- 3. Applying EU practices for biodiversity assessment and conservation in Khanty-Mansiysk Autonomous Area Yugra. In: Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University: Proceedings of the International Research and Practice Conference (Nizhnevartovsk, April 15-19, 2019). Nizhnevartovsk: Nizhnevartovsky gosudarstvenniy universitet Publ., 2019, pp. 42-48. (In Russian).
- 4. Skorobogatova Olga, Yumagulova Elvira, Storchak Tatiana V, Ivanova Nina. Phytoplankton of surface waters under oil pollution (Samotlor Field, Western Siberia) In: Periydico Tchк Quнmica. Vol. 16 N. 32. 2019. Pp. 306–320. <a href="https://www.periodico.tchequimica.com">www.periodico.tchequimica.com</a>
- 5. Bioindication of the influence of oil production on sphagnum bogs in the Khanty-Mansiysk Autonomous Okrug Yugra, Russia Authors: Olga Skorobogatova, Elvira Yumagulova, Tatiana Storchak (to appear).

### IV. TEAM INVOLVED IN THE PROJECT

Tatiana Storchak – Academic Coordinator, Candidate of Biological Sciences, Associate Professor.

Irina Pogonysheva – Coordinator, Candidate of Biological Sciences, Associate Professor.

## Members of NVSU teaching stuff involved in module-related research activities:

Olga Skorobogatova, Candidate of Biological Sciences, Associate Professor *Tatiana Storchak*, Candidate of Biological Sciences, Associate Professor *Elvira Yumagulova*, Candidate of Biological Sciences, Associate Professor

# Postgraduate students involved in module-related research activities:

Inna Lunyak, expert, Department for Natural Resources and Ecology, Nichnevartovsk City Administration

Maria Semochkina, postgraduate student of the Department for Ecology, NVSU

Проект Жан Монне "Применение передовых европейских практик по оценке и сохранению биоразнообразия в России" (Jean Monnet Project"Promoting biodiversity conservation in RF via advanced EU practices"), № 600034-EPP-1-2018-1-RU-EPPJMO-PROJECT

Координаторы: Т.В. Сторчак, И.А. Погонышева

Aleksey Arishev, engineer, Nizhnevartovsk Territorial Division Forestry of the Department for Forestry and Specially Protected Natural Areas, Department of Subsoil Use and Natural Resources of Khanty-Mansiysk Autonomous Area-Yugra

Ivan Didenko - Head of the Department for Ecology, OOO SibGeoProekt Research Center.

### Master students conducting module-related research:

Victoria Postnikova, master student majoring in Ecology Anna Kazakova, master student majoring in Ecology Ekaterina Ermoshkina, master student majoring in Ecology Vladislava Egorova, master student majoring in Biology Zukhra Ashurova, master student majoring in Ecology Nadezhda Didenko, master student majoring in Ecology

# Students conducting module-related research:

Yekaterina Gontazhevskaya, student majoring in Ecology and Environmental Management Regina Izguzhina, student majoring in Ecology and Environmental Management.

Maria Tkacheva, student majoring in Ecology and Environmental Management.

Evelina Yumadilova, student majoring in Ecology and Environmental Management

### V. STATISTICS

• Number of participants (course, seminars, conferences).

Title of the event	Number of participants
Awareness-raising seminar, 2018	85 participants
Photography contest "Biodiversity through the Lens"	45 photos
Master class and meeting with Yuri Ippolitov, a traveler, a naturalist photographer and a blogger	75 participants
Seminar (webinar): Cesc Múrria "New genomic tools for assessing the ecological status of rivers, and its application in eu water bodies"	50 participants
Seminar (webinar): Atena Groza "Biodiversity conservation in the European Union"	50 participants
Webinar: Enric Ballesteros, Esperança Gacia "European directives for the conservation of biodiversity and environment with focus on marine ecosystems"	50 participants
Webinar: Dr.Grégoire Dibois, Dr. Ole Ostermann "Introduction to the EU biodiversity strategy. Joint Research Centre of the European Commission"	50 participants
Summer school "Advanced EU practices in biodiversity assessment and conservation"	50 participants
International Research and Practical Conference "Intercultural Dialogue and Collaboration of the European Union and Russia: Implementation of Jean Monnet Projects at Nizhnevartovsk State University". Panel Session "Strategies of Biodiversity Conservation in the European Union and Russia: Best Practices and Cooperation Prospects"	114 participants 6 reports made in person 4 EU experts 7 reports to appear in book of proceedings
Interactive game "UNESCO World Natural Heritage"	74 participants