

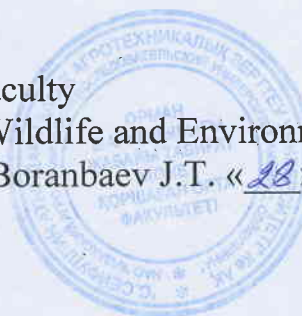
**«Kazakh Agrotechnical Research University named after S. Seifullin» KATRU**

Considered at the meeting  
Academic Council of the Faculty  
Record № 5 from  
« 26 » 12.2023

Approved  
Dean of Faculty

Forestry, Wildlife and Environment

 Boranbaev J.T. « 28 » 12. 2023y.



**DEVELOPMENT PLAN OF EDUCATIONAL PROGRAMS  
7M08304 – «RATIONAL UTILIZATION OF NATURAL  
BIORESOURCES»  
FOR THE ACADEMIC YEARS 2024-2028**

Considered at the extended meeting of the department \_\_\_\_\_  
Record № 5 from 1.12.2023

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## 1. Passport

Development plan of educational program - 7M08304-«Rational use of natural bioresources» for 2024-2028 years

1	Basis for development of the OP development plan	Strategy and subject matter of the development plan of the EP, in accordance with the educational policy of the Republic of Kazakhstan, the purpose of which is to prepare competitive in the labor market specialists of a new formation, possessing broad fundamental knowledge and practical experience, possessing modern methods of protection, control of reproduction and regulation of the use of wildlife and their habitat, as well as all types of hunting, including the provision of services in this area and production of hunting and fur farming products, taking into account the requirements of the requirements of the following areas
2	Main developers of the OP development plan	<p>1. Syzdykov Kuanysh Nygmanovich – Associate Professor of the Department of Game Science and Fisheries, Candidate of Veterinary Sciences</p> <p>2. Serik Narbaev – Associate Professor of the Department of Game Science and Fisheries, Candidate of Agricultural Sciences</p> <p>3. Asylbekova Ainur Serikbaevna - Associate Professor of the Department of Game Science and Fisheries, Candidate of Agricultural Sciences</p> <p>Employers:</p> <p>1. Isakhaev Bakhytzhon Akparovich - Inspector of the Sapsan operational group. RGKP PO Okhotzooptom of the Committee for Forestry and Wildlife of the MENR of the Republic of Kazakhstan, Master of Agricultural Sciences</p> <p>2. Berber Alexander Petrovich - senior researcher at the Wildlife of Kazakhstan LLP, candidate of biological sciences</p>
3	Timeframe for implementation of the OP	2024-2028yy.
4	Amount and sources of financing	Financing from the state budget, attraction of external sources of financing

5	Expected final results of the RP development plan implementation	Training of highly qualified specialists in the field of 7M08304-«Rational use of natural bioresources» in accordance with the requirements of domestic and world standards.
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## 2. Analytical substantiation of the program

Updated content of the OP; high quality of graduates training; realization of the OP with the addition of in-depth training taking into account the cognitive ability and needs of students.

**2.1 Information about the educational program.** Educational program 7M08304-«Rational use of natural bioresources» is aimed at in-depth theoretical and practical training of specialists in the field of protection and exploitation of hunting animal resources, training of highly qualified personnel in research, production-technological, organizational-administrative, project and pedagogical activities, competitive in the international labor market of specialists in the field of hunting, with a high level of general and professional culture, possessing the ability of scientific approach to the solution of national problems in this area.

The educational program is developed in accordance with the National Qualification Framework and professional standards, agreed with the Dublin descriptors and the European Qualification Framework.

The importance of the EP for the national economy is determined by the fact that it trains specialists for the labor market to ensure the rational use of natural bioresources of the country.

Educational programs contain theoretical training, including the study of cycles of general education, basic and profile disciplines; additional types of training, professional practice, intermediate and final certification. The volume of the EP is 120 credits, including 88 credits of theoretical training, 24 credits of undergraduate research work, 8 credits of final certification.

**2.2 Information about students.** At present 7M08304 - "Rational use of natural bioresources" - 1 master's student.

### Information about students in the 2023-2024 school year

№ п/п	Indicators	2023-2024
7M08304-«Rational use of natural bioresources»		
1	Contingent of undergraduates, total:	1
2	Number of master's students studying under state grants	1
3	Number of master students studying in the state language	
4	Number of master's students studying on a paid basis	-

**2.3 Internal conditions for the development of EP.** To implement the above educational programs at the department provides access of each student to databases and library funds formed by the full list of disciplines (modules). During independent training students are provided with access to the information-telecommunication network «Internet». Each student is provided with printed and electronic publications for each discipline and each interdisciplinary course (including electronic databases of periodicals).

The library fund is equipped with printed and electronic editions of the main and additional educational literature on disciplines of all academic cycles, published for the last 5-10 years, as well as reference and bibliographic and periodicals, Russian and domestic journals. The Information and Library Center has a computer room with open access to the Internet. The information and functional system includes several components: the catalog of books and articles of the University Information and Library Center based on the program «MAPK-SGL», working in real time with the help of an automated cataloguer's workplace, the catalog of own developments in full-text mode, electronic resources, Internet resources. Through the Internet in the information and library center there is a connection to the content on hunting, agriculture, electronic library system of publishing house «Lan».

Educational and methodical documents for the specialty are developed in accordance with the existing normative documents such as the state obligatory standards of education, standard curricula for the specialty, developed working curricula, academic calendars, EUMKD for all areas of study, as well as the relevant documentation for the training of bachelors, masters and doctoral students. The direction of preparation of master's and doctoral theses corresponds to the topics of scientific research of the department (funded projects and initiative topics of scientific research).

Particular attention is paid to such issues as increasing the tenure of faculty members, their professional development courses in domestic universities near and far abroad, research institutions, as well as the invitation of leading specialists of the Ministry of Agriculture of the Republic of Kazakhstan, scientists from higher educational institutions abroad.

Strengths:	Weaknesses:
<ol style="list-style-type: none"> <li>1. Compliance of the content of educational programs of the State Educational Standards, modern requirements of science and consumers, as well as their regular updating, due to constant changes in the needs for graduate competence, processes and economic integration;</li> <li>2. Step-by-step planning of the process of mastering educational programs according to the trajectory independently chosen by students in accordance with the rules of the credit system of education;</li> <li>3. Combination in educational programs of theoretical and practical training, independent work, as well as the presence of compulsory and elective</li> </ol>	<ol style="list-style-type: none"> <li>1. Insufficient number of inter-university exchange programs for students and teacher internships.</li> </ol>

disciplines that include components for preparation for professional activity, development of intellectual skills, creative abilities and personality of the learner;

4. Development and introduction into the educational process of innovative forms, methods of mastering educational programs, multimedia, providing training of highly qualified specialists;

5. Improvement of the intra-university quality management system, availability of structures for control and monitoring of the efficiency of students' mastering of educational programs;

6. Interdisciplinary connection.

9. Provision with computers and Internet access, renewal of the library fund.

**2.4 Characteristics of the surrounding society.** On EP «Rational use of natural bioresources» (master's degree) employers are:

1. Isakhaev Bakhytzhan Akparovich M.Sc. in Agricultural Sciences, Inspector of operational group Peregrine Falcon. RGKP PO Okhotzoprom of the Committee of Forestry and Wildlife of the MENR RK

2. Berber Alexander Petrovich - Senior Researcher, Candidate of Biological Sciences LLP «Wildlife of Kazakhstan».

There are 6 contracts with economic entities, where the students undergo practical training. The list of farms is given below:

1 Karkarala State National Natural Park

2 Aksu-Zhabagly State Natural Reserve

3 RGU «State National Natural Park «Kokshetau»

4 RGU «State National Natural Park «Burabai»

5 RGCP «PO Okhotzoprom»

6 RGU «Korgalzhyn State Nature Reserve»

Master students undergo research training in the countries of neighboring countries (Vyatka State Agrotechnological University, Irkutsk State Agricultural Academy named after A.A. Ezevsky (Russia).

Opportunities for graduates of the specialty as well as emerging threats.

**Opportunities:**

1. After mastering the educational programs of bachelor's degree graduates have the opportunity to continue their education on educational programs of postgraduate education.
2. Cooperation of agrarian universities of the republic in the training of specialists, exchange of experience in improving the effectiveness of educational programs.

**Threats:**

1. High cost of educational services compared to the average market price offered by competing universities.  
The high cost of educational services compared to the average market price offered by competing universities.

### **2.5 Information about teaching staff implementing educational programs.**

The implementation of educational programs 7M08304 – «Rational use of natural biological resources» is carried out by the university teaching staff in accordance with the cycle of basic and core disciplines.

Sedateness according to EP 7M08304 – «Rational use of natural biological resources»

Academic year	Sedateness according to EP 7M08304 - “Rational use of natural biological resources”, %
2023-2024	100

Employees of the department for the period from 2020 to 2023. underwent advanced training at the Irkutsk State Agricultural Academy named after A.A. Ezhevsky (Karagoishin Zh.M., master’s student Pazyl T.).

**2.6 Characteristics of EP achievement.** The department conducts scientific research on contractual topics in which students directly participate. In 2019, «Development of a biological substantiation for the artificial breeding and introduction of common pheasant (*Phasianus colchicus*) in the green zone of Nur-Sultan» and «Development of a biological substantiation for the breeding and reproduction of representatives of the order of diurnal birds of prey (Falconiformes) peregrine falcon, gyrfalcon, saker falcon were carried out» In 2020, «Biological justification for artificial breeding and introduction of common quail (*Coturnix coturnix*) and gray partridge (*Pedix pedix*) in the green belt of Nur-Sultan.» The topics of students' master's theses correspond to these areas of scientific research.

In accordance with the requirements of the labor market and at the suggestion of employers, new elective disciplines are being introduced into work curricula and catalogs of elective disciplines.

### **3. Characterization of the problems, which the EP development plan is aimed at solving, and justification of the necessity of their solution.**

Educational programs were created to train personnel to carry out professional activities in the field of rational use of biological resources, protection and reproduction of wildlife. Trained personnel in these educational programs must have the skills to study the state of animal numbers, possess scientific, production, organizational and managerial skills, capable of conducting experimental and theoretical research on modern problems and methods of protection and reproduction of the animal world, on the development of biotechnical measures for the reproduction of wild animals and birds.

**4. The main goals and objectives of the Development Plan with indications of terms and stages of its development.** The development plan for master's degree educational programs according to EP 7M08304 – «Rational use of natural biological resources» was developed based on requests from employers.

The purpose of the educational program is to train competitive, in the labor market, specialists of new formation, possessing broad fundamental knowledge and practical experience, possessing modern methods of protection, control of reproduction and regulation of use of wildlife and their habitat, as well as all types of hunting, including the provision of services in this area and production of hunting and animal

husbandry products, taking into account the requirements of employers. Providing economic entities of the Republic of various forms of ownership with highly qualified specialists possessing high theoretical and practical skills, capable of implementing the following principles as: - priority of practice-oriented knowledge; - orientation to the development of local and regional community; - formation of the need for continuous development and innovative activity in the professional sphere, including continuing education; - formation of readiness to make decisions and act professionally in non-standard situations.

The main objectives of the Development Plan are the following:

№	Name of task	Stages of development	Development timeframe
1	Improving and improving the conditions for obtaining full-fledged, high-quality vocational education	The entire academic period	Development of measures to improve educational services for the development of professional skills
2	Development of EP in accordance with the state compulsory standard of higher education and a classifier of areas of personnel training that form the basic professional competencies of future specialists in game management and fur farming	The entire academic period	When updating the content of the EP, include disciplines recommended by employers and competencies.
3	Creating prerequisites for the student's independent research activities as part of an experiment at all stages of training	The entire academic period	Inclusion of search, research and experimental work in the study of EP
4	Development of activities for mastering work with scientific and technical information using domestic and foreign experience in professional activities	The entire academic period	Carrying out activities to analyze and process the results obtained
5	Organization of consultations for employers and research institute scientists when choosing relevant and practically significant topics for master's theses	Start of training on EP 7M08304 - "Rational use of natural biological resources"	Creation of a list of relevant and practically significant topics, taking into account the proposals of employers and taking into account the research work of the department (state budget programs).
6	Involving students in the research	The entire academic	Inclusion of students



	work of the department by including them in research programs.	period	in the staff of grant programs.
7.	Implementation of research internships in universities of the Republic of Kazakhstan and foreign universities	The entire academic period	Concluding agreements with universities

### 5. Measures to reduce the impact of risks for OP

The following measures are used in the implementation of educational programs to reduce risks:

№ п/п	Name of possible risks	Measures to eliminate them
1	Insufficient provision of educational and methodological literature on professional disciplines in the state and English languages	To plan the annual release by scientists and teaching staff of scientific and educational literature in the state and English languages, according to the working curriculum of students
2	The traditional way of conducting classes	To improve and introduce innovative technologies of teaching and providing educational services at the level of world standards into the educational process
3	Outdated educational and laboratory facilities	Creation of modern educational, research and laboratory facilities based on public-private partnership, purchase of modern laboratory equipment
4	Lack of scientific and teaching staff due to retirement	Training of highly qualified scientific personnel through master's and doctoral studies (PhD) at the level of modern requirements
5	Small academic groups of students in Russian	Formation of a contingent of students of this profile through career guidance and information and advertising work, creation of multilingual learning groups

### 6. Action plan for the development of EP

Plan for the development of educational programs at Bachelor's, Master's and Doctoral programs

№	Name of events	Implementation timeline	Responsible	Expected results	Resource support
1	2	3	4	5	6
1	Formation of an academic committee for	September 2024-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	The academic committee will be approved by order	

	educational programs			of the university rector	
2	Development of goals and objectives of educational programs	October 2024-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	According to modern requirements, the goals and objectives of educational programs will be developed	
3	Determination of competencies of master's courses in EP disciplines	November 2024-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	The competencies of the EP will be determined	
3.1	Development of a common position on the competencies of educational programs with employers	December 2024-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	Common positions on EP competencies will be developed with employers	
3.2	Development of a common position on the content of disciplines of educational programs with employers	December 2024-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	Common positions on the content of EP disciplines will be developed with employers	
3.3	Formation and coordination of EP competencies and disciplines with Dublin descriptors	January-february 2025-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	The competencies of EP disciplines will be formed according to Dublin descriptors	
4	Formation of educational programs in accordance with professional standards	January-february 2025-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	The educational program is formed in accordance with professional standards	
5	Drawing up an academic calendar and working curriculum for	March-april 2025-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	The academic calendar and working curriculum of the EP have been	

	educational programs			compiled	
6	Consideration of educational programs at an extended meeting of the department with the participation of employers	May 2025-2028гг.	Syzdykov K.N., Narbaev S., Asylbekova A.S.	EP will be considered at an extended meeting of the department with the participation of employers	
7	Review and approval of educational programs by the academic council of the faculty		Syzdykov K.N., Narbaev S., Asylbekova A.S.	The EP will be reviewed and approved by the Faculty Academic Council	

### **7. Mechanism of realization of the educational program development plan.**

To carry out purposeful work to increase the number of grants for bachelor's, master's and doctoral studies in the specialty "Hunting and fur farming". For the implementation of educational programs by the staff of the department developed catalogs of elective disciplines not directly involving employers. There will be organized trips of students to the basic farms, to higher educational institutions of the countries of near and far abroad. Leading scientists of near and far abroad countries will be invited to conduct lectures and practical classes for students.

### **8. Assessment of socio-economic efficiency of the educational program development plan realization.**

Socio-economic effect from the realization of the educational program development plan.

As a result of implementation of educational programs in the farms will be implemented scientific developments and recommendations of scientists of the department, as well as explanatory work among graduates.

### **9. The model of the graduate of this educational program.**

As a result of training, the graduate must:

Have effective communication and social skills, including the ability to:

- apply knowledge of philosophy and methodology, higher education pedagogy, and foreign languages in intercultural, professional and scientific activities.
- apply the fundamental concepts of management psychology, knowledge of didactics, theory of education and educational management in teaching activities and in the process of professional development.
- improve systemic fundamental knowledge in the field of zoology.

*Know and understand:*

- fundamental and applied research in the field of zoology, using modern diagnostic and analytical methods.
- modern methods of geographic information systems (GIS), environmental

information in the study of biology and distribution of animals.

*Be able to:*

- interpret modern research methodology in the field of zoological science.
- predict the conservation and sustainable development of biological diversity using methods of qualitative and quantitative accounting of animal numbers.
- classify methods of bioindication and ecodiagnosics of natural habitats of living organisms for the restoration of disturbed ecosystems.

*Be competent:*

- develop scientific and scientific-technical programs and projects using scientific and technical information, rules and regulations of the legislative framework for the conservation of biodiversity.
- analyze scientific research, methodology when preparing articles, reports and master's thesis.

Head of the Department



Aubakirova G.A.