

профилактикалық кезеңде жеке торларда ұсталғандармен салыстырғанда тәуліктік өсім 8-17,5% - ға жоғары болды.

Сүттену кезеңі профилактикалық кезең аяқталғаннан кейін бірден басталады және бұзаулардың 6 айлық жасына дейін жалғасады.

Зерттеулер көрсеткендей, шектеулі қозғалыс кезінде жеке тар өлшемді жасушаларда бұзауларды ұзақ уақыт (90 күнге дейін) ұстау гуморальды қорғаныс факторларының және қанның кейбір биохимиялық көрсеткіштерінің төмендеуіне әкеледі. Бұл жағдайда асқазан-ішек және тыныс алу жолдарының ауруларының қаупі артады, өсу энергиясы баяулайды, жас жануарлардың жарақаты артады.

Бұзауларды профилакторлық кезеңде оларды жеке, ал сүттену кезеңінде топтық ұстау әдісі ұсынылады, ол жас бұзаулардың дұрыс өсуіне ықпал етеді, жемді тиімді пайдалануға ынталандырады, олардың қажетті өсуі мен дамуына қол жеткізуге мүмкіндік береді.

Қазақстанның оңтүстік-шығысындағы "Адал" АӨК АҚ базалық шаруашылық жағдайында ірі қара малының қара-ала тұқымды және алатау тұқымының қазақ қоңыр сүлесіндегі жаңа туған бұзаулардың өсуі мен дамуын зерттеу үшін шаруашылық профилакторлық кезеңде қоректендіргіштермен, ішетін ыдыстар мен шелек ұстаушылармен жабдықталған итальяндық өндірістің кең жеке жасушаларда ұсталған бұзауларға зерттеулер жүргізілді.

Өсірудің бұл әдісінің мәні бұзаулар профилакторияда екі ай бойы ұсталады, онда олар қоректік заттарды толық сүт, престаартерлер, стартерлер және дөрекі жем арқылы жеткілікті түрде алды, бұл организмнің күнделікті тірі салмақтың 0,8 кг-нан астам өсуіне қажеттілігін қамтамасыз етті. Сонымен қатар, қазақ қоңыр сүлесі бұзауларының тірілей салмақ өсу қарқындылығы 1,61 және қара-түрлі - түсті-1,64 болды. Профилакторлық кезеңнен кейін бұзаулар топтық жасушаларда алғашқыда 5 бастан, ал одан әрі өсу кезеңдерінде - 10-20 бастан ұсталды. Сонымен қатар, тәжірибелік бұзаулардың туғаннан 6 айға дейінгі тірі салмағының орташа тәуліктік өсуі орташа есеппен 840 г құрады.

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SCIENTIFIC AND ECONOMIC JUSTIFICATION OF METHODS FOR IMPROVING ANGUS CATTLE

ANNOTATION

The increase in the rate of intensification of beef cattle breeding, as well as the predicted increase in the number of beef cattle, requires its genetic improvement and necessitates the creation of large-format animals that can maintain high growth for a long time, give heavy carcasses with optimal

fat deposition, and have good reproductive qualities and milk production. The article presents the results of testing bulls for their own productivity, also studied the indicators of live weight, constitutional and exterior features of young Aberdeen - Angus breed. Summarizing the results of testing bulls in terms of their own productivity, it should be noted that for a complete reliable assessment of breeding value, the complex breeding index should be taken into account as an indicator that reflects the relative magnitude of the traits and is independent of the conditions of feeding and keeping. With a large number of bulls with the highest indicators of the complex class, the number of bulls with complex indices decreased, which indicates the dependence of the class assessment on the conditions of external factors. Thus, the results of testing bulls for their own productivity were characterized by various qualitative and quantitative indicators of class and index assessments, which makes it necessary to improve the methodology for organizing testing of bulls of meat breeds for their own productivity.

Key words: *beef cattle, live weight, exterior, average daily gain, test, index, productivity.*

Introduction. The problem of food, providing the growing population of the planet with adequate nutrition has become an important economic, social and political factor in the modern world. At the same time, the rational use of genetic resources of animal husbandry is of particular importance. The Republic of Kazakhstan is characterized by a sharply continental climate, seasonal nature of the food supply, low winter and high summer temperatures.

Within the framework of the program "Development of the export potential of cattle meat" in the period from 2011 to the present, more than 100,000 heads of breeding cattle of meat productivity have been imported from abroad to the republic.

In this regard, the problematic issues of increasing the reserves of cattle breeding products is an important national economic task, the solution of which primarily requires increasing the efficiency of the use of breed resources and the rational use of traditional technologies.

Also, solving the issues of qualitative development of any breed, including increasing the productivity of animals and creating a gene pool of highly productive animals, a special place is given to effective selection, selection and breeding work in general.

Setting the selection goal and determining selection criteria based on it are fundamental principles in the development and organization of a scientifically based breeding program in beef cattle breeding [1-4].

The most obvious and important goal of breeding is to maximize the economic effect of conducting breeding activities [5-7].

Thus, the results of the introduction of the breeding program are largely determined by the improvement of the characteristics of the highest economic importance. It is necessary to take into account the rational use of additive genetic variability of quantitative traits in the selection of animals, which leads to the improvement of the evaluation system and the accuracy of identification of selection and genetic parameters of economically useful qualities of beef cattle. On the other hand, the result of breeding work in herds should justify the funds spent on its implementation.

Recently, there has been a change in the orientation of breeding selection in the populations of farm animals: the attention of breeders has shifted from assessing the typicality and severity of the breed towards improving productivity, both in purebred and crossbreed herds.

However, the next step on the way to creating highly efficient animal husbandry will be the widespread use of economic models [8-11].

In practical work, the breeding value of an animal is determined by many signs with different economic significance [12-15].

It is possible to combine information about the severity of several animal qualities into an index. The effect of selection with simultaneous selection for several traits is determined by the selection differential, the correlation between traits and their genetic variability. Ensuring the maximum possible relationship between the breeding index and the breeding score is the most important factor in enhancing progress in herds.

Often these economically useful qualities differ in the level of variability, heritability, economic importance, correlation between genotype and phenotype. In this case, index-based selection becomes the most effective in comparison with sequential selection based on independent traits.

Also, the organization of breeding work using breeding indices contributes to the simultaneous improvement of the herd according to a set of indicators. At the same time, each attribute is assigned a certain weight coefficient in accordance with its significance, heritability and relationship with other qualities.

Thus, the simultaneous improvement of animals by several indicators makes it possible to achieve the maximum possible genetic progress in accordance with economic goals, as well as to increase net profit, profitability of production and the total breeding value of the herd, which is a fundamental concept, the final goal of breeding, which is extremely rarely fully realized in animal husbandry [16-18].

The Aberdeen-Angus breed is bred in the mountainous part of Scotland, a country with a harsh climate, is among the meat precocious breeds of world importance. The presence of natural meadows and pastures occupying most of the country contributed to the breeding of beef cattle. The breed was formed from two offspring of local cattle: Aberdeen – with a more pronounced meat type of physique and precocity, and Angus – tall and having a higher milk content.

In the original population of highland aboriginal cattle of Scotland for the Aberdeen Anguses and Galloways, gnarled animals have long appeared. It was probably a mutation that subsequently took hold.

In the mountains with a particularly harsh climate and poor soils, the cattle gradually replaced their horned relatives. In the press, information about the Scottish cattle began to appear starting in 1775.

They didn't attach much importance to it then. Later, relatively homogeneous Scottish cattle began to differentiate into three offspring – Aberdeen, Angus and Galloway. The Scots highly appreciated the ability of the Aberdeen Anguses to achieve high precocity in harsh conditions. Regardless of whether the tempering upbringing of the young of this breed was intentional or forced, it undoubtedly played a great positive role in the formation and formation of this breed. Formed later by Shorthorns and Herefords, the Aberdeen-Angus breed also became a breed of world importance [19-21].

Good adaptability to pasture maintenance is an important economic value of the breed. There was no fattening of beef cattle in Scotland, the animals were walked for 2-3 years on pastures, and then sold for fattening to England. Growing on pastures has developed the ability of animals to consume a large amount of green mass. Free-range content has left its mark on the temperament of animals, the strength of the constitution. The breed was popular on the market due to the fact that cattle were characterized by high meat quality and high slaughter yield.

The animals of the Aberdeen-Angus breed have a deep and wide trunk on low straight legs, a relatively light and small head, a short neck, a fairly wide back and loin, well-developed musculature. High quality meat is the main advantage of Aberdeen Angus.

The high yield of pulp in the carcass, pronounced grain and marbling of meat, its high calorie content, precocity are the main valuable qualities of this breed, which contributed to its wide distribution.

The predominance of terrain features in the selection of large animals did not allow to improve the milk production of Aberdeen Anguses, which is one of the disadvantages of the modern type of cattle of this breed.

Angus breeding (Aberdeen-Angus cattle breed) began in America in 1873 with the fact that George Grant, returning from his trip to England, brought four Angus bulls to the Kansas prairies, crossing them with local Texas longhorns. With this seemingly insignificant event, the widespread breeding of Aberdeen anguses in the United States began.

The appearance of this breed has influenced American agriculture more than any other, and the innovations of people like Grant have resonated throughout America.

Established in 1883, the American Angus Breeding Association is today a leader in the industrial cattle industry. Thirty-two thousand members of the association annually register almost three hundred thousand heads of cattle, which is the largest number of one breed in the world.

The association's catalogues contain more than 16.5 million individual pedigrees and 18 million parameters. Armed with such rich information, according to the genetic assessment accumulated by the American Angus Breeding Association, breeders engaged in this breed have the opportunity to identify and select the best producers for breeding.

Over 50% of all Angus cattle registered annually are reproduced by artificial insemination from the best breeding bulls of this breed. More than 11% with the help of embryonic transplants. The constant genetic improvement of the breed has led to the fact that Angus occupies a leading position in the world market.

Currently, the Angus breed accounts for more than 50% of all purebred cattle breeds registered in the United States. Two-thirds of all large farms in the USA refer their cows to the Angus breed and require producers and suppliers of calves of this breed, which has maintained a high reputation for many years.

Certified Angus beef (SAV), produced on the initiative of the American Angus Breeding Association since 1978, is a high-quality product and the most popular brand of fresh meat.

According to the US Breeding Service, the catalog for the sale of beef bull semen includes animals with very high body size and breeding value. So, Aberdeen-Angus bulls had an average height at the withers – 146.3 cm, live weight in 2-4 years – 928-1213 kg.

It should be noted another equally important breeding feature of Aberdeen Angus cattle - the quality of meat, its quantity. In California, 11 Hereford and 4 Aberdeen Angus bulls were evaluated by offspring for 188 days. There are no differences in the output of meat. However, there were significant differences in the evaluation of carcasses: in animals with the highest body weight gain, a large payback of carcasses was revealed.

Currently, breeding work with the breed is aimed at creating a type of large and stretched animals with an extended period of intensive growth [22].

When crossing animals of the Simmental and Aberdeen-Angus breeds (Gorbatykh E.S., 2001), the following indicators were obtained: the average daily increase for different periods of cultivation ranged from 862 to 1185 g, the slaughter yield was 56.9 percent.

When crossing the Swiss and Aberdeen-Angus breeds, the following results were obtained: the average live weight at weaning is 231.2 kg; the average daily increase is 851-1000 g. Modern Aberdeen-Angus cattle are characterized by a proportional physique, well-defined meat forms.

Animals, as a rule, are low-legged, compact, broad-bodied, with a barrel-shaped trunk, report that there is a certain relationship between the exterior of animals, the peculiarity of the physique and the level of productivity. The presence of intra-breed types in the breed with a high degree of severity and uniformity of breed characteristics can significantly increase the effect of breeding on the main economically useful characteristics of animals [23-25].

At the present stage, the most promising is a large type of Aberdeen-Angus cattle, capable of growing intensively for a long period of time due to the development of muscle tissue.

Objects and methods of research. As part of the implementation of the Aberdeen-Angus breed project, farms of the Cisengaliev and Musa farms of the West Kazakhstan region were selected.

In accordance with the set goal, the following have been studied during the reporting period:

- comparative assessment of the intensity of growth and development of young animals of different sex and age groups in the context of breeds;
- testing of bulls on their own productivity from 8 to 15 months in the context of breeds.

The live weight of the bulls was determined monthly by weighing in the morning before feeding and watering, according to the live weight indicators at 8 and 15 months of age, the absolute increase, relative increase according to the Brody formula, and average daily increase were determined. Feed costs are determined by monthly control feeding for 2 adjacent days and establishing the average of the feed consumed both in absolute value and nutritional value. Meat molds were set by eye according to the degree of severity on a 60-point scale at the age of 15 months.

The testing of meat breed bulls by their own productivity was carried out in accordance with the "Instructions for the evaluation of meat breed bulls by their own productivity and quality of offspring" (Almaty, 2010) - No. 1 of December 26, 2009. The decision of the NTS of the Ministry of Agriculture of the Republic of Kazakhstan, the inspection and evaluation of meat breed bulls by the quality of offspring and the test of bulls according to their own productivity (Order of the Ministry of Agriculture of the Republic of Kazakhstan dated 07/19/210, No. 456, as well as "Instructions for bonitizing beef cattle" (Order of the Ministry of Agriculture of the Republic of Kazakhstan dated 06/16/2000, No. 162)).

The processing of the received digital material was carried out by the method of variation statistics using the Microsoft Excel 2007 program.

Research results. Animals of the Aberdeen-Angus breed in 2022, compared with previous years, according to the class composition in the KH "Musa" shows the results of a decrease, and in the KH "Sisengaliev" in the direction of an increase. According to the analysis of the class composition of farms, it can be characterized that both farms are conducting systematic breeding work to improve the Aberdeen-Angus breed, but has some features for the introduction of breeding work with the specifics of economic.

The value of live weight is an important and most objective indicator of the growth and development of livestock, and largely characterizes its level of meat productivity (Table 1).

Body weight is a breed trait, but nevertheless it depends on many factors, which are the intensity and method of cultivation, gender, age, adaptive qualities and physiological state, and so on.

Table 1 – Dynamics of live weight and growth rate of young animals ($X \pm S_x$)

Year	Live weight (kg) at the age, months.								SSP from 8 to 15 months.	
	6 months.		8 months.		12 months.		15 months.			
	«Musa»	«Sisengaliev»	«Musa»	«Sisengaliev»	«Musa»	«Sisengaliev»	«Musa»	«Sisengaliev»	«Musa»	«Sisengaliev»
Bulls										
2020	196,1±4,04	-	262,3±3,47	-	331,3±3,15	-	389,1±0,41	-	714,1±1,23	
2021	196,1±14,08	194,1±12,75	274,8±3,21	245,3±1,87	340,6±2,70	333,3±0,76	402,5±3,45	390,6±3,01	764,4±3,21	727,7±2,54
2022	194,3±4,04	190,1±0,67	-	-	-	-	-	-	-	-
On average	195,5	192,1	268,5	245,3	335,9	333,3	395,8	390,6	-	-
St-t breeds	190		230		335		400		-	
Prev-e,%	2,81	1,1	16,7	6,6	0,26	- 0,5	-1,05	- 2,3	-	
1	2	3	4	5	6	7	8	9	10	
Heifer										
2020	195,6±2,73	-	225,0±1,74	-	299,5±1,96	-	330,2±0,23	-	499,5	
2021	175,6±11,3	181,2±16,2	229,1±3,84	226,1±2,89	297,1±4,20	300,3±2,13	329,1±3,80	381,5±3,12	568,5	762,5
2022	185,6±1,36	178,6±1,98	-	-	-	-	-	-	-	-
On average	185,6	179,9	227,1	226,1	299,1	300,3	329,6	381,5	-	-
St-t breeds	175		215		290		330		-	
Prev-e,%	6,05	2,8	5,6	6,16	3,13	3,55	- 0,12	15,2	-	

According to Table 1, the dynamics of the change in live weight at 6 months of age shows that in bulls in 2022, compared with 2020, in the farm "Musa" decreased by 0.92%, and in the farm "Sisengaliev" - 2.10%.

At the age of 8 months, the data on live weight varied, and starting from 12 months it showed an increase.

By the age of 15 months, the differences have become more significant due to their physiological characteristics and needs. At the same time, a similar pattern in live weight was observed in heifers of the Aberdeen-Angus breed.

The study of measurements of young Aberdeen-Angus breed showed that no such significant differences were detected and corresponds to the breed standard (Table 2).

Table 2 – Main measurements of Aberdeen-Angus bull calves, see

Bullhead measurements	Bulls					
	8 months		12 months		15 months	
	«Musa»	«Sisengaliev»	«Musa»	«Sisengaliev»	«Musa»	«Sisengaliev»
Height at the withers	96,27±0,1	97,3±0,55	107,1±0,1	107,6±1,8	113,2±0,1	114,2±2,3
Height in the sacrum	102,8±0,2	101,6±1,2	110,5±0,1	109,1±1,6	116,1±0,2	117,3±1,2
Chest depth	44,2±0,1	47,7±0,54	54,2±0,1	50,6±1,06	61,2±0,5	62,6±0,77
Chest width	32,6±0,1	32,6±0,47	33,5±0,1	35,1±1,30	36,2±1,7	38,1±0,63
Width of the layout	32,8±0,2	32,8±0,83	34,4±0,1	36,6±1,31	42,8±0,4	41,7±0,42
Oblique length of the trunk	101,4±0,1	102,3±0,7	121,3±0,1	123,6±1,4	132,3±0,2	131,8±1,4
Oblique butt length	42,6±0,2	30,1±0,56	55,9±0,1	35,7± 0,6	65,8±0,2	67,6±0,98
Chest girth	143,9±0,5	142,5±2,8	152,6±0,3	147,2±0,8	173,0±0,4	173,3±0,4
Pastern girth	16,0±0,4	16,2±0,72	17,3±0,04	17,7±0,28	18,3±0,1	18,9±0,12

Thus, the analysis of the data obtained from Table 16 made it possible to conduct a comparative assessment of exterior features by years, which showed that the young have a harmonious physique and well-defined meat forms.

At the same time, the above indicators for the study of measurements of young animals turned out to be unreliable, this can only characterize the revealed trend for the analyzed period.

The study of the physique index also characterizes the physiological state and productivity of animals to a certain extent (Table 3).

Table 3 – Indices of the physique of Aberdeen-Angus bulls, %

Indices	Bulls					
	8 months		12 months		15 months	
	«Musa»	«Sisengaliev»	«Musa»	«Sisengaliev»	«Musa»	«Sisengaliev»
Long legs	55,4±0,1	50,9±0,1	52,9±0,4	50,8±0,74	50,2±0,2	45,2±0,2
Elongation	113,3±0,5	113,3±0,5	111,9±0,1	111,9±0,1	110,9±0,3	110,9±0,3
Pelvic-thoracic	105,5±0,7	105,5±0,7	100,2±0,5	100,2±0,5	97,6±0,7	97,6±0,7
Chest	75,0±0,3	75,0±0,3	69,1±0,2	69,1±0,2	64,6±0,3	64,6±0,3
Downfal	120,0±0,4	120,0±0,4	119,7±0,2	119,7±0,2	129,8±0,7	129,8±0,7
Overgrowth	104,1±0,3	104,1±0,3	101,5±0,1	101,5±0,1	102,6±0,2	102,6±0,2
Коститости	17,8±0,04	17,8±0,04	16,6±0,03	16,6±0,03	16,1±0,08	16,1±0,08

For example, the elongation index characterizes the relative length of the trunk in relation to the height of the animal, the downness index characterizes the relative development of the animal's live body weight, the chest index indicates the development of the animals' breasts during life, and the massiveness index reflects the development of meat qualities in animals.

In this regard, according to the physique index, it should be noted that during the analyzed period there was no obvious superiority of animals of a certain period (Table 4).

Table 4 – The results of the Aberdeen-Angus bull calves test

Name of farms	n	Live weight, kg			The average daily increase is from 8 to 15 months.		Feed costs per 1 kg of gain		Lifetime evaluation of meat forms, score		Overall score of points	Class	Complex index
		8 months	15 months	Ind.	g	Ind.	k.e	Ind.	scores	Ind			
PE «Musa»	15	229,61	399,94	100,0	811,1	100,1	8,01	100,0	55,17	100,0	40,6	Elite	100,0
PE «Musa»	17	225,5	387,6	98,4	675,4	98,6	8,4	99,6	54,2	99,1	40,1	Elite	99,4

According to the results of the index evaluation, the results of the test of bulls in both have no significant differences, it is also important to note that the productive indicators of animals directly depended on the climatic conditions of recent years.

Conclusions. Summarizing the results of the test of bulls on their own productivity, it should be noted that for a complete reliable assessment of the breeding value, the complex breeding index should be taken into account as an indicator reflecting the relative magnitude of the signs and independent of the conditions of feeding and maintenance.

With a large number of bulls with the highest indicators of the complex class, the number of bulls with complex indices decreased, which indicates that the class assessment depends on the conditions of external factors.

Thus, the results of the test of bulls on their own productivity were characterized by various qualitative and quantitative indicators of class and index assessments, which necessitates improving the methodology for organizing the testing of beef bulls on their own productivity.

As a suggestion, farms engaged in testing bulls for their own productivity should provide full-fledged feeding during the test period, including grain-legume hay, hayloft or corn silage, concentrated feed, table salt, and in case of insufficient nutritional value of forage crops, use full-fledged feed additives, which will allow more objectively determining the genetic potential of the herd.

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РЕЗЮМЕ

Увеличение темпов интенсификации мясного скотоводства, а также прогнозируемый рост поголовья мясного скота требует его генетического совершенствования и вызывает необходимость создания животных крупного формата телосложения, способных длительное время сохранять высокий прирост, давать тяжеловесные туши с оптимальным жиротложением, обладать хорошими воспроизводительными качествами и молочностью. В статье приведены результаты испытания бычков по собственной продуктивности, также изучены показатели живой массы, конституционально – экстерьерные особенности молодняка абердин – ангусской породы. Резюмируя результаты испытания бычков по собственной продуктивности следует отметить, что для полной достоверной оценки племенной ценности следует принимать во внимание комплексный селекционный индекс как показатель, отражающая относительную величину признаков и независящая от условий кормления и содержания. При большом количестве бычков с наивысшими показателями комплексного класса количество бычков с комплексными индексами снизилось, что свидетельствует о зависимости классной оценки от условий внешних факторов. Таким образом результаты испытания бычков по собственной продуктивности характеризовались различными качественными и количественными показателями классной и индексной оценок, что вызывает необходимость совершенствования методики организации испытания бычков мясных пород по собственной продуктивности.

ТҮЙІН

Етті мал шаруашылығын интенсификациялау қарқынының артуы, сондай-ақ етті ірі қара мал басының болжамды өсуі оны генетикалық жетілдіруді талап етеді және ұзақ уақыт бойы жоғары өсімді сақтай алатын, оңтайлы маймен ауыр салмақты өлекселерді бере алатын, жақсы репродуктивті қасиеттерге және сүтке ие ірі дене пішіміндегі жануарларды құру қажеттілігін тудырады. Мақалада гобилерді өз өнімділігі бойынша сынау нәтижелері келтірілген, сонымен қатар тірі салмақтың көрсеткіштері, Абердин – Ангус тұқымды жас жануарлардың конституциялық және сыртқы ерекшеліктері зерттелген. Гобилерді өз өнімділігі бойынша сынау нәтижелерін қорытындылай келе, асыл тұқымдық құндылықты толық сенімді бағалау үшін белгілердің салыстырмалы мөлшерін көрсететін және азықтандыру мен ұстау

жағдайларына тәуелсіз пп индексі ретінде кешенді селекциялық индексті ескеру қажет екенін атап өткен жөн. Кешенді сыныптың ең жоғары көрсеткіштері бар бұқалар саны көп болған кезде кешенді индекстері бар бұқалар саны азайды, бұл сыныптық бағалаудың сыртқы факторлардың жағдайларына тәуелділігін көрсетеді. Осылайша, гобилерді өз өнімділігі бойынша сынау нәтижелері сыныптық және индекстік бағалаудың әртүрлі сапалық және сандық көрсеткіштерімен сипатталды, бұл ет тұқымдарының гобилерін өз өнімділігі бойынша сынауды ұйымдастыру әдістемесін жетілдіру қажеттілігін тудырады.

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BREEDING WORK WITH KAZAKH WHITE-HEADED CATTLE WITH THE FORMATION OF THE NECESSARY GENE POOL

ANNOTATION

The most obvious and important goal of selection is the maximum receipt of the economic effect from the implementation of activities aimed at increasing selection and breeding work. An equally important direction on the way to creating highly efficient animal husbandry is the widespread use of economic models. In practical work, the breeding value of an animal is determined by many features with different economic significance. According to the test results of Kazakh white-headed bulls on their own productivity, they were carried out in accordance with the «Instructions for evaluating beef bulls on their own productivity and offspring quality» (Almaty, 2010) - No. 1 dated December 26, 2009. checking and evaluating beef bulls for the quality of their offspring and testing bulls for their own productivity (Order of the Ministry of Agriculture of the Republic of Kazakhstan dated 19.07.2010, No. 456, as well as the «Instruction for grading cattle of beef breeds» (Order of the Ministry of Agriculture of the Republic of Kazakhstan dated 16.06 .2000, No. 162)). The studies were carried out in «Aisulu» farm, «Dongelek» farm, «Hafiz» farm, «Chapaevsky» LLP, «Eset» farm, «Zhannat» farm, «Tolegen» farm, «Alem» farm and «Naryn» farm West Kazakhstan region. The results of the study showed that in the farm «Aisulu» the live weight of bulls when removed from the test at the age of 15 months. amounted to 401.7 kg, with an average daily gain of 810.8 g with a feed consumption of 7.0 feed units. Also, the indicators of the class and index evaluation of bulls based on the results of their testing for their own productivity had a similar trend in the farms of the «Dongelek» farm, «Hafiz» farm, «Eset» farm and «Naryn» farm and corresponded to the standard and higher.

Key words: *Kazakh white-headed, breed, selection, gene pool, live weight, class, cows, bulls, growth rate, test.*

Introduction. The most obvious and important goal of breeding is to maximize the economic effect of carrying out activities aimed at improving breeding work [1 – 5].

It is believed that setting a selection goal and determining selection criteria based on it are