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6. INTERNATIONAL AFRICAN CONFERENCE ON CURRENT STUDIES

THE LIFE EXPECTANCY OF INDIAN WILD DONKEY KHUR

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Abstract

The important place in the group of Asian wild donkeys, so called half-donkeys as only African donkey is considered a genuine wild donkey, takes an Indian wild donkey (half-donkey) khur (*Equus hemionus khur*, Lesson 1827). It is well known as *Equus blandfordi*, Pacock 1947 (Urošević et al. 2022). It dwelled also on the Syrian territory in the old times. It lived on the drought-affected area in the North-West part of India and on the bordering area in Pakistan

The information for the due survey was taken from official documents - National Studbook of Indian Wild Ass (*Equus hemionus khur*) published by Wildlife Institute of India, Dehradun and Central Zoo Authority, New Delhi. Three studbooks were published. The life expectancy values were estimated for each gender. A year was taken as 365 days and a month as 30 days.

The average life expectancy in the Zoo for jacks was 721, 1 days with variation interval from 6 to 5380 days. For jennies it was 765, 1 with variation interval from 1 to 7935 days. The average life expectancy for the foals born by donkeys paired in the Zoo is 2731 day. Variation interval is from 6 to 7752 days.

Key words: Asian wild donkey, Zoo, life expectancy

Introduction

The important place in the group of Asian wild donkeys, so called half-donkeys as only African donkey is considered a genuine wild donkey, takes an Indian wild donkey (half-donkey) khur (*Equus hemionus khur*, Lesson 1827). It is well known as *Equus blandfordi*, Pacock 1947 (Urošević et al. 2022). It dwelled also on the Syrian territory in the old time. Lived on the drought-affected area in the North-West part of India and on the bordering area in Pakistan.

This animal was unknown for European scientists for a long time. It was first mention in the book „Indian Zoology“. The book was published in 1790 by Richard Pennant (Richard Pennant, first baron Penrhyn, 1737-1808). Scientists examined this information with great interest.



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When this book was published, an unknown author wrote the article about Indian wild donkey and the article was issued in the Encyclopaedia magazine “Isis” in 1823. This naturalistic magazine was published by a German naturalist and philosopher Lorenz Oken (1779-1851). The attention to these peculiar animals grew, so in 1832 the London Zoo got two donkeys of that kind. They were sent to Paris later on.

Nowadays this type of wild donkey dwells on quite a small territory. It lives in the desert part of Gujarat district of West In India. Supposedly they also live in Baluchistan, the biggest province in Pakistan.

Intensive reduction of donkeys number in 1960 revealed a big problem of breeding and keeping them. Khur almost completely disappeared in Iran and Pakistan and its number considerably reduced in India. They only remained in Little Rann region there. A reserved area Dhrangadhra was set in order to protect this type of donkeys. It is a fenced-in territory of 6500 square kilometres.

Materials and methods.

The information for the due survey was taken from official documents - National Studbook of Indian Wild Ass (*Equus hemionus khur*) published by Wildlife Institute of India, Dehradun and Central Zoo Authority, New Delhi. Three studbooks were published. The first one in 2010, the second in 2016 and the third one in 2018. The first book keeps information on the 70 donkeys registered before 31 August of 2008.

The first studbook keeps information of the period from 1958 to 1984 on registered wild donkeys born from unknown parents. After 1984 till 2001 were only registered donkeys with unknown farther and known mother or with both parents known.

As the birthdates of foals registered in the first studbook were unknown, their life expectancy was counted from the day of their entering the Zoo till their death there. In case of one parent known, namely a mother, or both parents are known, the exact birth and death dates of a foal are well known. To make data registration complete the pairing age of jack and jenny were estimated. In case of knowing only the date of entering a jack or jenny to the Zoo, the estimation is based on their first pairing.

Life expectancy was estimated for each gender. A year was taken as 365 days and a month as 30 days.

Results

The first registered donkey was a jack caught on 6 January 1958 and the same day brought in to the Zoo Junagadh. It was registered under number 1. Number 2 was given to the jenny caught on 31 May 1960. She was brought the same day to Junagadh (a town in the region of the same name in Gujarat state).

The last jack under number 52 in the studbook was caught on 31 January 1990, his parents unknown. The last jenny under number 64 in the studbook was caught on 18 August 2001, her parents unknown.

The first registered jack had been living in the Zoo from 6 January 1958 till 10 September 1972 (5380) days. The first registered jenny lived short. She was brought to the Zoo on 31 May 1960 and died 15 November 1960 (225 days).

On browsing the donkeys live expectancy from the day of their setting in the Zoo we can see some notable facts. A jenny and two jacks were caught on 18 August 1984. They were got to the Junagadh Zoo the same day. Both jacks died in 6 days and a jenny died in 30 days.



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A few days later, on 23 August 1984 there were caught 7 donkeys: 3 jennies and 4 jacks. One jack died in 55 days, the second one in 26 days, the third one in 18 days, and the fourth one in 16 days. One jenny died in 67 days, the second one in 56 days and the third one died the day of arrival in the Zoo.

The longest registered live expectancy had a jack number 51, his parents were caught in the wild nature. He was born on 23 July 1989 and lived for 21 years.

Table 1. Life expectancy of jacks and jennies in the Zoo

<i>Sex</i>	<i>Average±SD</i>	<i>Min</i>	<i>Max</i>	<i>CV</i>
Male (n=25)	721.1±1212	6	5380	168.0
Female (n=28)	765.1±1744	1	7935	227.9

Average life expectancy of jacks is 721,1 days with variation interval from 6 to 5380 days. Average life expectancy of jennies is 765,1 days with variation interval from 1 to 7935 days.

Table 2. Life expectancy of donkeys born in the Zoo from known parents.

<i>Parameter</i>	<i>Average±SD</i>	<i>Min</i>	<i>Max</i>	<i>CV</i>
Jacks' age at mating	1689±729.9	1130	2955	43.2
Jennies' age at mating	1689±269	1495	2040	19.9
Life expectancy of foals	2731±2988	46	7752	109.4
Life expectancy of male	4356±4083	959	7752	110.2
Life expectancy of female	1647±1387	46	2456	54.2

Average life expectancy of foals born from parents paired in the Zoo is 2731 days. Variation interval is from 46 to 7752 days. The average age of parents by pairing was the same for both jacks and jennies that is 1689 days. Variation interval for jacks is from 1130 to 2955, and for jennies from 1495 to 2040 days.

Conclusion

Average life expectancy of jacks is 721,1 days with variation interval from 6 to 5380 days. Average life expectancy of jennies is 765,1 days with variation interval from 1 to 7935 days.

Average life expectancy of foals born from parents paired in the Zoo is 2731 days. Variation interval is from 46 to 7752 days.

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