A collection of mammals from El-Jafr, southern Jordan

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Through the courtesy of Mr. *Taher Qalyoubi*, the manager of the Beduin Settlement — Pilot Project in Jordan, I was able to spend five days at El-Jafr Experimental Farm Station to survey the mammalian fauna of the area.

Trapping and night-hunting were done on the experimental station grounds and the immediately surrounding area over the whole period, except for one night where trapping was carried out at 50 kilometers west of El-Jafr, at the intersection of the El-Jafr dirt road with the Ma'an — Al-Hasa desert highway. 75 specimens were collected, 55 of which were prepared as study skins. These specimens represented eleven species. Another species, *Lepus arabicus*, is also incorporated on the bases of sight records, making a total of twelve species recorded from this area.

The following are the three main habitats found within the studied area:

a. Hamada or flint desert lacking or with very sparse vegetation.
b. Wadi systems heavily vegetated with various shrubs.
c. Human habitations including houses, storage compartments, and gardens.

Systematic Notes

Insectivora

Paraechinus aethiopicus pectoralis Heuglin, 1861. — Very little is known about this Ethiopian Hedgehog originally described from Petra, Jordan. Harrison (1964) mentioned that the original description of this race was not very complete, and that it seems to be very close to the race *dorsalis*, suggesting that it could prove to be a prior name for the latter race inhabiting southern and central Arabia.

The specimen from El-Jafr is definitely different from *P. a. dorsalis*, in that the whole carapace is of a uniform dark color lacking the dorsal median dark stripe of *dorsalis*.

Carnivora

Vulpes vulpes arabica Thomas, 1902. — One Red Fox was caught alive after being run down by a beduin employed on the farm. Several others were seen at night around the station and along the highway between Ma'an and Al-Hasa, where they were found feeding on dead birds and jerboas killed by passing vehicles.

Three dens were located in two different wadi systems. One of the dens had a single entrance, while the other two had two entrances each, placed about one half a meter apart horizontally. This form can be easily separated from *V. v. palaestina*, the latter being appreciably larger and darker with a slightly shorter tail.

Hyaena hyaena syriaca Matschie, 1900. — One Striped Hayaena was found dead after being run over by a car, half way between Ma'an and Al-Hasa. According to the beduins inhabiting the area, hyaenas are common and are occasionally seen in numbers ranging between two and five feeding on dead horses or camels.

Lagomorpha

Lepus arabicus arabicus Ehrenberg, 1833. — Arabian Hares seem to hide under the shrubs within wadi systems during the day time and feed at night. Though none were collected, two were scared from their hiding places during the late afternoon while setting traps in the large wadi south of the station.

Rodentia

Jaculus jaculus vocator Thomas, 1921. — Three-toed Jerboas were found to be very common all over the flint desert surrounding the station and on the farm itself. Twenty-two specimens were collected by three young beduins. Their technique was very simple, but it involved a good understanding of the jerboa's habits. The jerboa burrow system usually has two entrances, one is used for going in and out of the burrow, while the other entrance is used to throw out the soil resulting from the enlarging of the burrow system, thus this last opening is always surrounded by a pile of excavated soil. During the day time jerboas keep both of these entrances closed by packing a thin layer of soil at the opening as a protection against predators and heat. When these young beduins locate a burrow system, one of them starts digging at the entrance with the excavated soil around it. The jerboa feeling insecure will dash out immediately using the other entrance to find himself within the bag of the other beduin. To the beduins jerboas seem to be the favourite evening dish.

Allactaga euphratica Thomas, 1881. — One mummified Euphrates Jerboa was found, 50 kilometers west of El-Jafr, in a hole dug to retain water during the winter months. Judging from the fact that none were seen while night hunting it may be safe to say that this is a very rare species in this area.

Mus musculus Linnaeus, 1758. — A total of five House Mice were collected on the station, four of which came from the buildings used for storage or living. The fifth specimen came from around a barley field, where it was found sharing the habitat with *Gerbillus henleyi, G. dasyurus,* and *Meriones libycus.*

Surely these house mice must have been introduced in this area after the establishment of the experimental station, and probably in later years they will be found more common around the cultivated land.

Gerbillus dasyurus dasyurus (Wagner, 1842). — Two adults and one immature were collected around the cultivated fields on the farm. Wagner's Gerbils were found to share the same habitat with the more common gerbil on the farm, *G. henleyi.*

Gerbillus henleyi de Winton, 1903. — A total of ten Pypmy Gerbils were collected, seven of which came from the dykes surrounding the barley fields. Their burrow entrances were extremely small being not more than 1½—2 cm. in diameter. The other three specimens were trapped at large burrow entrances belonging to either *Meriones libycus* or *Psammomys obesus,* within a large wadi three kilometers south of El-Jafr.

Meriones libycus syrius Thomas, 1919. — The Libyan Jird was found to be the commonest rodent within wadi systems and along the irrigation ditches on the farm. More than thirty specimens were collected, but only twenty were prepared for study. About half of those collected were found to be either subadults or immature, while none of the adults was found in breeding condition. This suggests that the breeding season ends from late May to mid June. In wadis where a good plant cover is available, these rodents construct elaborate burrow systems with numerous entrances hidden under various shrubs. A huge pile of excavated soil and dried up plants surrounding each entrance is characteristic of these jirds. They also seem to be active in the early morning and late afternoon as well as at night.

Meriones crassus crassus Sundevall, 1842. — Five specimens of Sundevall's Jirds were collected, three of them came from the same habitats as *M. libycus*. The other two specimens were trapped on the bare hammada, 50 kilometers west of El-Jafr. On the hammada their burrows could be seen from a long distance. As a result of their digging the black hammada is interrupted with mounts of red sand pushed out by these rodents.

Psammomys obesus obesus Cretzschmar, 1828. — Fat Sand Rats were found to be very common in wadi systems and shared the same habitat with *Meriones libycus*. Six specimens, three adults and three immatures were trapped. These rodents were very active during the day as well as the night and could be seen at any time of the day sitting at the entrances of their burrows sun-bathing or feeding. They are voracious feeders as well as being active diggers.

References

Ellerman and Morrison-Scott (1951): Checklist of Palaearctic and Indian Mammals 1758—1946. London, British Museum (Nat. Hist.), 810 pp., 1 map.
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Populationsstudien an steppenbewohnenden Nagetieren Ostafrikas[1]

1. Mitteilung

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Aus dem Institut für Haustierkunde der Christian-Albrechts-Universität
Direktor: Prof. Dr. Dr. h. c. W. Herre

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Die Säugetierforschung hat über Jahrzehnte hinweg bis weit in unser Jahrhundert hinein ihr Interesse vorwiegend großen Formen gegenüber bekundet. Den kleinen und kleinsten Arten — unter ihnen vor allem die großen Schar ratten- bis mäusegroßer Nagetiere — wurde nur mehr gelegentlich Aufmerksamkeit geschenkt, nicht zuletzt wohl auch deshalb, weil sie nicht nur in hohem Maße unscheinbar sind, sondern auch eine versteckte und vorwiegend nächtliche Lebensweise führen. Erst als man erkannte, welche Bedeutung gerade sie für den Menschen erlangen können, trat hier ein Wandel ein: Es wurde die Erforschung vieler Arten zu einem dringenden Anliegen der Praxis, weil sich herausstellte, daß eine ganze Reihe von ihnen in die Rolle land- und forstwirtschaftlich wichtiger Formen hineinzuwachsen vermochte, andere wiederum als Träger von Infektionskrankheiten den Menschen und seine Haustiere zumindest mit-

[1] Der Fritz-Thyssen-Stiftung bin ich für großzügige finanzielle Unterstützung zu Dank verbunden.