

Herpetological Notes for Ras Jiunri, Baluchistan*

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Limited opportunities were presented to collect and observe the herpetofauna of the area while I was stationed at a remotely located airfield at Ras Jiunri Baluchistan, India (now Pakistan). Ras Jiunri, sometimes called Jiwani, is a small peninsular projection in the Arabian Sea at the extreme southwestern border of Baluchistan and about ten air-miles east of Iran.

The surrounding country is arid desert with rocky hills of limestone and shale, and sparsely vegetated except in the immediate vicinity of oases and along river banks.

As a basis for climatic comparisons, information derived from data for Yuma County, Arizona, as given in Yearbook of Agriculture (1941) are presented along with data from AAF weather station records at Ras Jiunri.

Locality	Mean Jan. temperature	Mean July temperature	Mean annual precipitation
Yuma County	51.4°	92.1°	5.16 inches
Ras Jiunri	65.0°	85.5°	6.5 inches

Seventy-five per cent of the annual rainfall at Ras Jiunri was concentrated in December through February. Mean monthly temperatures in excess of 80° F. were recorded from April through October. The proximity of the Arabian Sea undoubtedly ameliorates the climate, and heavy dews make more water available to desert fauna and flora than would be apparent from the precipitation data.

The small number of lizards listed do not represent the only species seen, but are the only species positively identified from field notes or from specimens preserved and returned to the United States. Additional or large specimens were not collected because of a shortage of preservative fluid and space. The snakes listed were the only species seen or caught with one exception—a small black and yellow ringed sea-snake was seen twice but escaped. Only one toad was seen, and it was not collected.

All observations and collections were made between the 9th of September and the 5th of November, 1945.

Crocodylus palustris Lesson. The marsh crocodile was found in some of the deeper pools of the Dasht River. In addition to several sight records, four fresh skins measuring from four to five and one-half feet in length were brought in by the Baluchis. The Dasht River is listed as the westward limit of distribution for the species by Smith (1931).

Alsophylax tuberculatus Blanford. This terrestrial gecko was seen only at night. Specimens were quite active and difficult to catch even when partially blinded by flashlights. No specimens were kept.

Agama agilis Olivier. Two juveniles were collected and preserved. The head is chunky in appearance, with the snout short and strongly curved in profile. The upper head scales are unequal in size, smooth, and are generally larger on the base of the skull region rather than on the snout as described by Smith (1935). Lengths of the two specimens are 143 and 148 mm., and the snout to vent measurements are 52 and 55 mm. respectively. Both lizards were found in the open on a bare rock formation above the beach during the hottest part of the afternoon. They did not appear very alert in comparison with many other lizards seen, but were quite adept at dodging from one rock to another when chased.

Agama melanura (Blyth). Several of these lizards were seen, but only one was captured after considerable effort. It was retained alive for a time, but died under conditions not permitting preservation. It was a male with a patch of white callose preanal scales about five scales in diameter, and another patch about twice this size on the middle of the belly. The head and neck were light yellowish brown, the rest of the upper body shading into black; the belly, limbs, and underside of tail were pale brownish. The tail comprised about two-thirds of the total length of seventeen inches.

Acanthodactylus cantor Gunther. This small but very agile lizard was abundant everywhere on the sand dunes of the coastal area. Individuals seldom strayed far from the mouths of burrows which entered almost every clump of a low brushy shrub which grew in the sand. Whether or not the lizards made the bur-

rows is not known. It was observed that the lizards took refuge in them only when hard pressed, preferring to interpose the vegetation between themselves and pursuer.

The specimen is apparently typical. The only variation is that the preserved specimen has six light stripes instead of four or five as described by Smith (1935). Since this is a half-grown individual, the difference may be one of age only.

Varanus monitor (Linnaeus). One juvenile specimen was collected. Two additional specimens about eighteen inches in length were seen in the thorny brush fringing the sandy banks of the Dasht River. A few of the men at the field reported seeing large monitors about a yard in length in the rock and coquina areas near the beach. Tracks and body imprints indicative of specimens about this size were seen in the fine dust under ledges.

Ophiomorus blanfordi (Blanford). This burrowing skink, apparently plentiful if the number of burrows may be considered a reliable criterion, was very difficult to obtain. Seven specimens, five of them with broken tails, were finally brought in by Baluchis after personal collecting efforts had failed. The habitat is the sandy area along the coast, their burrows being most commonly seen radiating in all directions from the clumps of grass growing above the high tide zone.

The five lizards with broken tails were adults, the other two were juveniles. One juvenile died under conditions not permitting preservation, but the remaining six were returned alive to the United States. Two of them are still alive at the present time, over three and one-half years after capture.

The specimens conform to the description of the types with one minor variation, noted only on the preserved juvenile. This specimen lacks the brown dot in the center of each dorsal scale. This may be a case of individual variation or a character which changes with age. Snout to vent measurements of an average adult are 92 mm.; the tail is broken, but it is at least equal in length to the body in normal adults.

The collection of this species amounts essentially to a rediscovery, since it is apparently known from only two specimens collected by Major Mockler in 1879, somewhere in southern Persia or Baluchistan and probably near the coast. (Smith, 1935).

Coluber rhodorachis Jan. Two juveniles were found, both in army barracks. One was brought in dead and was preserved; the other one was retained alive for two months. It fed readily on small lizards, but was itself eaten by a saw-scale viper when the two were placed in the same cage. The preserved specimen is 400 mm in total length, and has 229 ventrals and 141 caudals. These two young racers were the only harmless snakes seen in the area.

Enhydrina schistosa (Daudin). This sea-snake was the most common snake of the area. Two adults were captured by a Baluchi fisherman in a cast net and given to me. They were kept in about six inches of sea water in an open-topped, five gallon gasoline can. One died a week after capture, but the other snake lived over a month in the can and was eventually released. Although both snakes frequently raised their heads and necks several inches above the surface of the water, at no time did either snake attempt an escape from the cramped quarters. When placed on land, they floundered aimlessly without any forward progress. Neither snake displayed any sign of irritation, even when picked up by the tail.

The head and a section of skin from the midbody region of one specimen were preserved. The snake measured three feet in length, had 55 rows of scales, and is apparently typical in all respects. Smith (1926) mentions the curious physiognomy of this species.

Bungarus caeruleus Schneider. A large specimen of the common krait was found crawling by a barracks in the neighboring RAF camp about two hours after sunset, and notification of its presence was received in time to capture it. It lived in captivity for ten months, half of which time was spent in the United States. The snake refused all food except other snakes, which were readily accepted. The same inoffensive attitude was exhibited by this specimen as has been described for kraits in general.

The male specimen agrees with descriptions of the typical form with only slight color variations. The typical krait is described as being black or bluish-black above with narrow white cross bars, and having the upper lip and lower parts white. The Ras Jiunri specimen is brownish-black above, shading into a chocolate brown on the sides; the cross bars and ventral surface are pale yellow (faded to

white in preservative), and the lips bright yellow. The total length is five feet two and three-quarter inches, and the tail is seven and one-eighth inches. There are 235 ventrals and 50 caudals. Smith (1943) records ventrals as 194-234, and caudals as 42-52 for this species. He further states that specimens are found up to five feet in length, but are rare.

The distribution map in the cited publication indicates the westernmost limit of the krait to extend only a few miles west into Baluchistan from the border of the Sind. The present collection record is a westward range extension of slightly over three hundred miles.

Echis carinatus Schneider. Two specimens of this very irritable little snake, commonly called saw-scale viper, were captured at night on the road. Both were brought back alive to the United States, where one lived for about two years and the other for two and one-half years. Their lengths were about eighteen inches each at time of capture. Both specimens agree with the typical description. The captivity observations will be the subject of a later paper.

Pseudocerastes persicus Dumeril and Bibron. Two specimens of this eye-horned viper were taken at night, one in the camp area and one on the side of a steep rocky hill. Both snakes were quite vicious and hissed with considerable force during and after capture. The volume of hissing might be favorably compared with that of members of our American genus **Pituophis**. These snakes were also returned safely to the United States, and one of them is still alive at the time of writing, over three and one-half years from date of capture. Length was about twenty-eight inches each at time of capture. Further notes on this species will be given in a later paper.

Chelonia mydas (Linnaeus). The green turtle was commonly seen along the coast. They were so numerous at one locality on the peninsula that the men named it the Turtle Cliff. From this vantage point one could often see as many as a dozen large turtles at a time floating or swimming just beyond the surf. Nocturnal egg-laying activities were evident from the numerous turtle tracks on the sandy beaches. From the air or a high cliff it appeared as though a number of caterpillar tractors had been running around on the beach. Many nests were found, although most had been robbed by foxes and hyenas. Man is apparently not an important enemy of turtles in this area, since the Baluchis denied using them or their eggs as food. The three specimens taken by us at night on the beaches for food were large females, with shell lengths of about three feet. Still larger ones were seen during the day in the water.

Local information on reptiles was not always reliable. Many Baluchis were not prone to distinguish one snake from another, and considered them all dangerous regardless of species. Some lizards were also placed in this category and carefully avoided.

It is believed that this area would offer many interesting possibilities for future collecting, since it is so remote from larger centers of civilization that practically no one has ever collected there. Properly equipped, a collector should be able to make an impressive collection, especially of lizards, and the amount of life history data available would be almost limitless. It will always be a matter of regret that both my stay at Ras Jiunri and my collecting facilities were so limited.

Literature cited

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