

TRIP REPORT

SUBJECT: Notes on Herding, Pastures and Nomads in the North Central Registan

This report is based on a two-day field trip into the North Central Registan desert made during the middle of November 1973. This is the area bordered on the North by the Arghandab River, on the east by the Helmand River, and on the north and west by the Duri River. Roughly translated, Registan means the place or country of sand (Farsi). The trip was made with a USAID driver from Lashkar Gah, and a Baluch nomad, a man of perhaps 50-55 that we located in a newly established camp 5-10 miles south of Darwishan. Considering that he continuously re-directed our vehicle on to the proper course and we hit our destinations without backtracking or making any major deviations in course in this area with few land marks observable to me (with my topo-map), it became obvious that he knew the area well. The routes shown on the government topo map vary considerably in their visibility. In some of the flat areas the routes are equivalent to a jeep road, clearly marked with use. In other areas, particularly through the sand dune areas (which drift), the routes tend to be visible only periodically and probably change on occasion. This report, while tentative in its conclusions, should be considered supplementary to the memo "Herds, Pastures and Nomads in the Lashkar Gah Area," written in October 1973 to Mr. James Wedberg, Assistant Program Officer.

We entered the desert from the Darwishan irrigation - drain system near the shrine (zyarat) of Amir Beland Saheb about 10 miles south of Darwishan. Almost immediately after leaving the flood plain of the Helmand River the sand dunes begin, gradually growing larger. The ridges of these dunes generally run in a north-south direction. The highest of these dunes could be no more than 50-75 feet high and so do not compare with the much larger dunes reported farther south and also farther north along the Arghandab River in the Kandahar direction by Francois Balsan in the Journal of the Royal Asian Society, 1972. In the south he reports dunes of up to 80 meters.

According to the topographical maps there should be an "Asadullahkhan Kala" about 10 miles east of our starting point. Neither our Baluch guide nor villagers in the area of the shrine, our starting point, had any idea of its location or existence. If it is there we must have passed not more than 1 1/2 - 2 miles from it. The areas 5-10 miles into the sand dunes are notable for the increase in quantity and size of desert "trees" which are probably some variety of salt cedar. They do not get very tall but the trunks, buried in sand, range up to 6-7 inches in diameter. The increase in the tree growth is likely related directly to the ability of heavy vehicles to get into the area to collect fire wood. (see photo) For the first 3-5 miles there is evidence of

considerable truck traffic, gradually diminishing. Camel tracks and trails are noticeable at any point throughout the entire area covered.

In the area through which we passed, the sand dunes gradually diminish into more rolling hills. At perhaps 20 miles, these hills flatten into a plain. This change in topography is accompanied by a change in vegetation with the salt cedar type of bush largely disappearing; it continues only along a series of washes flanked by sand that cut through some of the region. The ground cover becomes much thicker with what I can only guess at: mostly sage and other tough varieties of small bush and grass. I did not notice much camel thorn. The relatively dense ground cover of vegetation is probably the combined results of rain-fall and lack of intensive grazing; the area does receive limited use.

Fairly soon after emerging on to the rolling plain our guide began to point out a number of the "tanks" or hand-dug ponds noted in the previous report. These are referred to as nawar (Pashtu). They are larger and have a much more permanent look about them than most constructions for water collection noted in the clay deserts north-west of Lashkar Gah.

Our guide directed us to the first of a number of clusters of nawar located in the bottom of what appeared to be a dry, shallow lake bed without vegetation. This was the Gorestani Nawar with which the guide was associated. These dry lake beds, or sinks, are sometimes a mile across; others are relatively narrow (100-300 yards) but long closed "valleys" sitting between gently rolling terrain. Some are shallow (10-20 feet below surrounding ground) while others are deep with escarpment banks with drops of 50-75 feet.

The nawar are of generally one design. (see photo) They are elongated horseshoe shaped structures 25-35 yards long and 10-15 yards wide with the open end facing upslope. In the dry lake beds this slope is not easily determined. The earth removed is piled around the edges. The actual excavation may be 3-4 feet deep with the larger nawar. In some cases in the flat lake beds where the flow of rain water requires directing, small earth works were constructed out from the nawar entrance to deflect and catch more of the water. In two cases there was evidence of tractors having been used in cleaning and deepening the excavations. Most likely these come in from the north, which appears to be the most common direction of entrance into the plain region for wheeled vehicles.

The nawar is apparently a kin group -- camp group operation but the size of group or number of tents associated with any particular nawar is a subject for observation. The cluster of nawar in a sink indicates a concentration of population during the season of use. Unlike the clay deserts to the north, the sandy nature of much of the soil probably limits the wide dispersion of tents over the plain during even the rainy season. In the clay desert, water collects in natural sinks and along the washes allowing nomad

dispersion after the rains. In the more sandy Registan, however, serious efforts are required to trap and collect the water. According to our guide, no shepherds move into this region until after the first rains when water can collect in the nawar. And they remain in the area as long as the collected water lasts, said to be 3-4 months. No wells were observed in this north central area. The guide noted that he had heard of wells in the region of the desert mountain of Tangoy Ghor, visible from Nur Mohammad Band, some 65 kms. farther east from that point. To the south some 30 kms there is also a well (Srehdab on the government topo maps) which is ecologically associated with this nawar region, discussed below.

From Gorestani Nawar we went to Hawdz Kala, as it is known locally, which is not named on the topo maps but appears to be the location at about the coordinates 41 RPQ844.5 on sheet No. 605, WNW of Duldul Nawar (named on the map). According to the map legend, Hawdz Kala is an unnamed well. There is no well but a mud ruin of a fortress-like structure of stacked-mud and brick construction, generally, and about 30-40 yards square (unmeasured). Our Baluch guide had no idea of origins. Balsan relates it probably to a "Qala Bost" dependency. Hawdz means "pool, pond or small reservoir" according to the map glossary, and the ruin is sitting on the edge of a rather extensive sink network or hollow. The visit of a regional archaeologist might tell us what the structure was. The area on the map is called Hawdz Dasht (desert) which likely relates to the numbers of dry lake beds found.

From this ruin, we proceeded to Nur Mohammad Band, as it is known locally (Nur Mohammad Nawar on the topo map). This site was reached across a relatively flat but also well vegetated plain, cut by periodic washes, edged by sand, which generally run in an east-west direction, noted earlier. On this plain we saw no gazelle which are suppose to inhabit the area but their tracks were found running along the washes where they had grazed on the bushes but were not observable.

As can be noted on the map, this region has many nawar, all dry during this early winter season. On our brief visit, probably 30 were visited. The number of nawar suggests that a relatively large population moves into this area in season and, at least in the past, a number of flocks of sheep associated with the people. The Baluch guide noted that perhaps 1 in 10 tents, or households was as economically strong i.e., had a large number of sheep left. Like himself, most had been hit hard by disease during the drought. He mentioned the infestation of liver fluke as related to the loss. As an hypothesis, restated from my last report, and supported by nomad statements, it seems likely that with the drought, groups moved off the depleted desert pastures (in this case perhaps because of the early drying up of the nawar) into the artificial environment of the irrigation systems where the snail lives, the liver fluke vector. The sheep become infected with liver fluke through grazing in these areas. And the fluke is one stage in development of Blacks Disease which struck as an epidemic in the Darwishan area during the fall of 1971. It would appear that with early awareness of such shifts in traditional pasture uses, predictions of the potential for animal

disease can be made, and action taken. Further, a clear understanding of what the traditional seasonal changes of location and patterns will allow scheduled monitoring of conditions.

The Nur Mohammad Band represents an important item of traditional engineering. Hopefully, a second visit to the area, will include a technician or two, to identify clearly the significance of the labor involved. This "band" or dam is distinct from the nawar in the sense that there is a large earth dam rather than the simple horseshoe shaped dug-out pond of the nawar. (see photos attached) The dam in this case is 30-40 yards in length and perhaps 20 feet high on the downhill side. At its thickest (at the base) the dam is probably 10 yards across. Topping off the dam is a tower of stacked earth construction, with cross-stick or light log roof support, about 15 feet high. From the tower roof great distances across the desert can be viewed. The tower also acts as a landmark in this generally featureless terrain. Up-slope from the dam is a large dug tank, about the same size as the larger nawar, i. e., 10 x 30-40 yards. Up-slope from this tank is a large, cleared and sloped drainage basin perhaps 50 yards wide and 100-200 yards long, which drains water efficiently into the tank via a small spill way. In clearing and sloping this basin the earth moved was placed in spaced piles across the floor of the basin eliminating the need to haul it to the outer edges. The entire construction, which is not new, appeared to have been done by hand shovels.

According to our Baluch guide the large number of nawar of this north central area of the Registan are used during late winter and the ~~early~~ spring season of the year, by Baluch groups. This is during the wet season when rain water can collect in the nawar. As the warm and hot weather begins the general migration is to the south, as water dries in the nawar. Khan Neshin (some 80 kms SSE of Darwishan) was the area mentioned as the most frequent destination. There was one mention of some movement north into the mountains of the Hazarajat, the direction of Pashtun tribal transhumance migration which occurs at same time. There was one mention of Pashtun migrant groups in the area besides the Baluch. In Khan Neshin the river was the water source during the hot weather period of 3-4 months. Some nomad households were known to have started working in the farmers' fields for wheat harvest in recent years, as has been reported also for some Pashtun nomads in other Helmand districts. This Baluch added that no nomad with sufficient animals in his flock to be solvent would work in the harvest; such work is degrading for the maldaran (sheep herders). As with his herd, however, times are difficult.

After the hot season at least some of the herds were moved out into the central desert, the area to the south of the nawar where there was at least one well. The well is inhabited for 3-4 months through fall and early winter until the first rains which trigger the move north, as noted previously. There is no way, without further study of the groups being considered, to know the numbers of people involved in the pattern of

movement described. A quick survey of the nawar users after the rains begin would answer this question since it appears that the nawar area use represents a seasonal concentration of camp groups that have a variety of different migratory patterns.

From the Nur Mohammad Band we went in a south westerly direction about 30 km. where the landscape became more rolling hills, more sand, less vegetation but still more ground-cover than in the dune area, and more dry lake beds with numerous nawar. In this area there are several roads or routes that show evidence of considerable use by motor vehicles, the most used being one which runs north and south located between Hawdz Kala and Nur Mohammad Band. We saw one gazelle and the only flock of desert grouse (taru) seen during the trip. The notable absence of this usually numerous bird in the region, during the winter season, was associated with some disease that struck last year. We drove west through a deep flat lake bed, which I since have tentatively identified on the map as Darazpet. At the western end of this lake flat is a narrow defile between escarpments 30-50 feet high. This passage had previously been damed with an earth works 4-5 feet high which has now been washed out. This suggests a point to be made on the location of the nawar. None visited were located in any of the many washes in the area but they generally were in relatively gently sloping areas. Desert washes are notorious for flash flooding over the world and the earth works would be quickly washed away.

From Darazpet we returned North West to our original track and back to Darwishan.

SUMMARY OF POINTS:

1. Apparently a sizable proportion of the Baluch nomads in this region lost large numbers of their sheep from disease during the drought period, over the past 2-3 years. This has forced some into farm labor roles.
2. The north central area of the Registan is one stage in the yearly transhumance migration patterns of some Baluch groups. It is an area used only after the first winter rains can collect in nomad constructed tanks or ponds.
3. The limitation of water in the area likely results in a concentration of camp groups around these water sources during the late winter season. Surveys of herd and pasture conditions could best be made at this time of population concentration.

RECOMMENDATIONS:

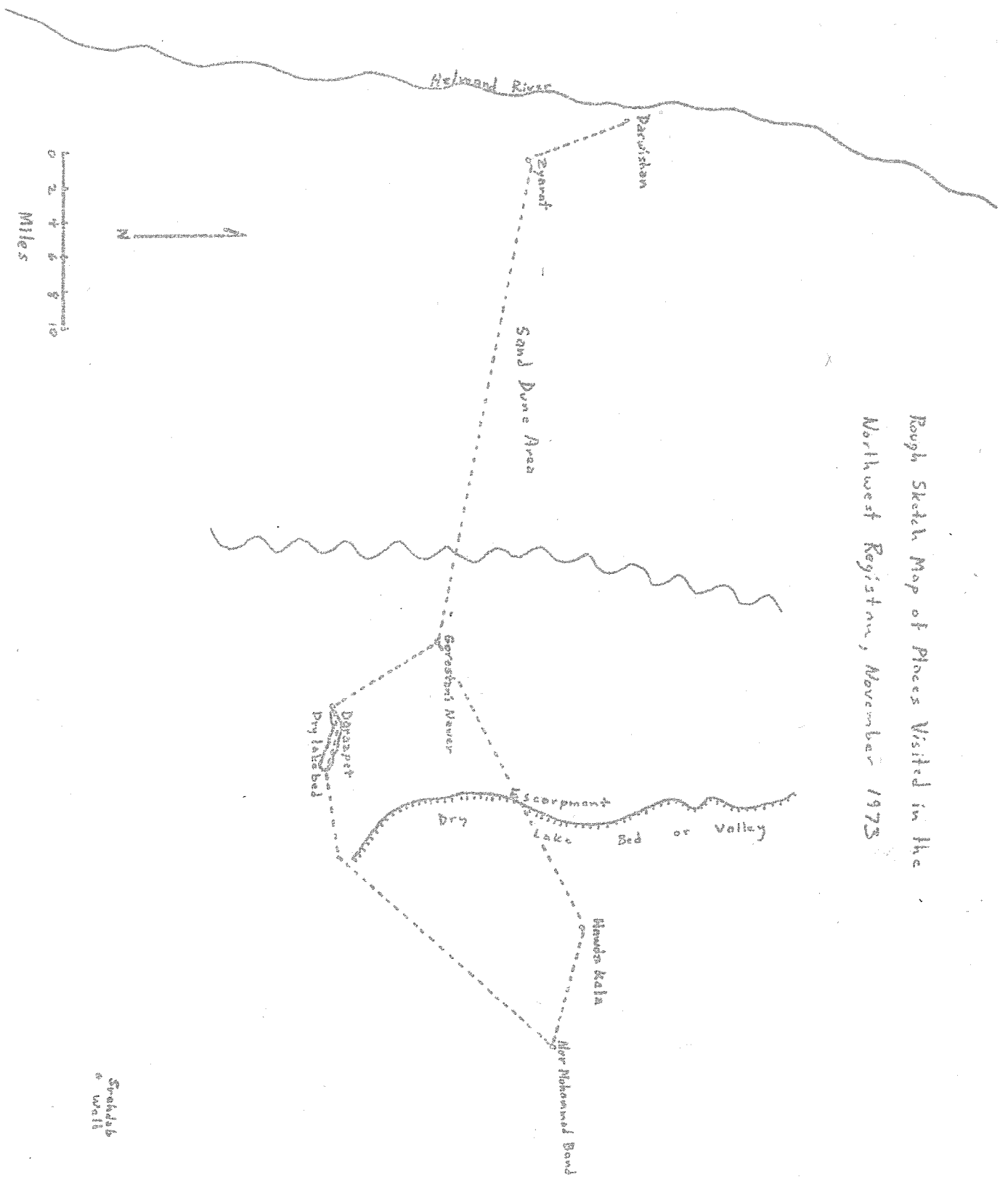
1. Further, brief, visits to the area should be made later in the winter to verify some of the information gathered and to fill in more of the details of pasture and water use, and the organization of this use.

2. Any future project involvement in sheep production should be firmly based on knowledge of nomad migration patterns, natural pasture and water use.

3. Animal health activities in the region should include continuous monitoring of these patterns of organization for changes. Such monitoring would act as early warning system for potentially hazardous animal health conditions.

Richard B. Scott
Program Office
January 1974

Rough Sketch Map of Places Visited in the Northwest Rajasthan, November 1973





The Sand Dune area in the Registan



Gorestani Nawer lake bed. Note other nawer in background



Hawdz Kala



Nur Mohammad Band with tower. Note piles of earth in drainage area in background. A much larger drainage area is to the right.

DATE: March 4, 1974

Addendum:

On February 21, 22 and 23 roughly the same field trip was repeated. There had been considerable rain in the region during the previous month and a half. The dry lake beds all had several of inches of water standing in them making travel somewhat more difficult. The nawer were all full of water. Nur Mohammad Band had perhaps 6-8 feet of water in its main tank. Grass was beginning to sprout across the entire area with the promise of good pasturage later this spring. We met several shepherds with herds of sheep and goats in the area taking advantage of the early greenery. They all appeared to be of Pashtun tribal affiliation with some herds originating from the settled populations outside the desert area e.g. a Darwishan land owner.

More wildlife had moved into the area. At least 14 gazelle were seen. Several groups of desert turkey were noted as were a number of flights of sand grouse.

At the Gorestani Nawer five men were contacted as they were checking out the area for their future move. They said that presently they were camped on the Srehdab Wells, as best I can figure. They planned to move to the Nawer in 20-25 days (after 15 March). The group consisted of 3 Baluch (Mangal) and 2 Pashtun (Nurzai) tribesmen. They said that there were perhaps 100 tents or 1000 people presently camped on the wells, and that also included Brahui groups. The nature of the relationship between the groups is not known, nor the relative numbers of tents involved, a subject for further study and, necessarily, observation. The limited information does suggest, however, a pattern of mixed tribal groups using the same desert resources.