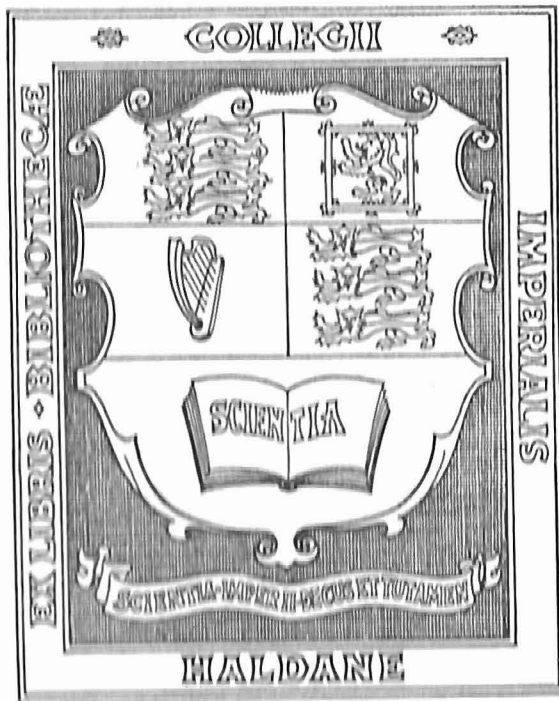


IMPERIAL COLLEGE
OF SCIENCE & TECHNOLOGY

IRAN 1960

THE EXPLORATION BOARD



IMPERIAL COLLEGE EXPEDITION TO

IRAN, 1960.

Final Report.

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INTRODUCTION

An expedition to the Elburz Mountains of northern Iran was originally planned by a group of Second Year undergraduate Botanists. The mountains consist of an area of extremely diverse vegetation which was virtually unexplored botanically. It was considered that a party of undergraduates would be able to carry out useful collecting and descriptive work.

However, it became clear that, for financial reasons, the number of personnel would have to be reduced and a wider field of work pursued. It had also become apparent that the cost of transport for such an expedition, unless an over-land journey was undertaken, would be beyond the means that the expedition was likely to raise.

With these facts in mind the two members of the original party set about rebuilding the expedition in the Autumn of 1959. A postgraduate Engineering Geologist was invited to join the party and a mechanic was selected from a number of applicants.

With a party of four chosen and a suitable vehicle in hand, the task of organizing the expedition began with enthusiasm.

At this point the members of the expedition would like to say that no amount of hard work would have got them to Iran, had it not been for the very generous advice, help and support that so many people and organizations gave.

We owe more than we can ever repay and are sincerely
grateful.

D.A.F.

D.K.F.

B.H.P.

J.W.S.

PERSONNEL

J.W. Sheard - Age 20yrs. Leader and Botanist.
Second year Botanist.
Responsible for stores.

B.H. Pressman, B.Sc. - Age 21yrs. Assistant Geologist
and Photographer.
Third year Chemist with a basic knowledge
of Geology.
Responsible for general equipment and visas.

D.A. Faulkner, B.Sc., D.I.C. - Age 23yrs. Geologist.
Postgraduate Engineering Geologist.
Responsible for medical equipment.

D.K. Fisk. - Age 22yrs. Mechanic and Surveyor.
Second year Electrical Engineer. Basic
knowledge of surveying techniques.

No member had the previous experience of an expedition, although each had considerable camping experience and three had travelled extensively on the Continent.

EXPEDITION MOVEMENTS

<u>Date of arrival</u>		<u>Date of departure.</u>
Sheard, Pressman, Faulkner, Fisk.		
	London	July 17th
July 25th	Istanbul	25th
Aug. 3rd	Tehran	Aug. 4th
4th	* Latyan dam site	6th
6th	Tehran	6th
7th	Kalardasht valley Base camp	
Faulkner, Fisk.		
	Base camp	Aug. 22nd
	Tehran for vehicle spares	
Aug. 26th	Base camp	
Sheard, Pressman, Faulkner.		
	Base camp	Aug. 27th
	Treck into Takht-e- Sulaiman Group.	
Aug. 31st	Base camp	
Sheard, Pressman, Faulkner, Fisk.		
	Kalardasht valley	Sept. 5th
Sept. 6th	Tehran	
Sheard, Pressman, Fisk.		
	Tehran	Sept. 8th
Sept. 15th	Istanbul	15th
23rd	+ London	

- * Delay due to arriving in Tehran on Thursday night, the beginning of the Iranian weekend.
- + Three days were spent in Austria, only one necessary.

DESCRIPTION OF AREA

Summer winds from the Caspian Sea bring a heavy rainfall to the northern slopes of the Elburz Mountains. Near the coast this produces a dense deciduous forest that has been described as being sub-tropical. Higher in the mountains, as in the Kalardasht Valley at 4,500ft., the rainfall is less and cultivation is possible in the stony valley bottoms. However, irrigation is necessary, as the limestone base rock and glaring sun soon account for the rainfall.

The mountain people are virtually self supporting. They grow and mill their own grain, using it to bake flat bread on heated stones. Meat is obtained from a few cattle but more generally from the numerous flocks of sheep. These animals also provide the peoples clothing in the form of both wool and leather. Milk is produced by goats which graze with the sheep flocks and is immediately made into yoghurt. A further summer occupation of the villagers is wood-chopping and charcoal burning to provide fuel for use during the hard winter.

The houses in the villages are grouped around a series of squares. Their low overhanging eaves provide protection against the sun. The walls are built of stream boulders and mud plaster which is white-washed. The houses have open windows which are shuttered against the winter snows. Roofs are of wooden tiles weighted down with stones.

Rudbarek at the head of the Kalardasht Valley, was one such village. The valley narrowed considerably above this point being scarcely able to accomodate the glacier-fed torrent, the Sardabrud river, and had extremely steep forested slopes to a height of 8,000ft. It was in this valley that we positioned our base camp.

The source of the Sarabrud is in the Takht-e- Salaiman group, an alpine region dominated by the 16,300ft. Alum Kuh. The alpine meadows of this group are the home of the ibex or mountain goat. The tree line and upper forest harbour the extremely shy brown bear. Their tracks were seen numerous times but the bears were sighted on only one occasion. Wild Boar are common below 4,000ft. and Tiger, a protected species, is said to be on the increase in the sub-tropical forest.

It was in these exhilarating surroundings that our work was carried out, in what, for long periods, were hardly exhilarating conditions. We have already mentioned that we were camped in the summer rainfall zone. For weeks at a time we would watch the morning cloud roll up the valley from the Caspian and know the rest of the day would be spent in mist and drizzle.

Come rain or shine, there is not one of the party who does not wish to visit the region again.

Summary of Accounts

<u>Income</u>	£
Shell International Petroleum Limited	100
British Petroleum Limited	100
William Johnston Yapp Charitable Trust	40
English Electric Company Limited	35
Imperial College Exploration Board	170
Personal Contributions	<u>160</u>
TOTAL	<u>£605</u>

<u>Expenditure</u>	£
Vehicle and equipment	198
Fuel and cross-channel fare	201
General equipment	75
Food	55
Postage and stationary	10
Visas	9
Preparation of reports	15
Sundry expenses	<u>41</u>
TOTAL	<u>605</u>

SUMMARY

There has been some concern as to the justification of motorised expeditions in recent years. Criticism that too much time is spent on the road and not enough in the field, and that travel on four wheels can no longer be classified as 'adventurous' is not without cause.

A strict daily routine and living by the sun instead of by the clock, results in a great saving of time. The outgoing journey, due to heavy loading and inexperience, will undoubtedly be the slower. Following the route of the expedition and assuming that no mishaps occur, twelve to fifteen days is a reasonable estimate for the journey, depending on the type of vehicle available. It should be possible to gain two days on the return journey.

There is much scientific work to be carried out in the region. No account of the flora of the area has yet been made and a study of the complex structural geology would be rewarding to a qualified Geologist. Much would be gained by an expedition taking the field earlier in the season when the vegetation is in flower and the rain less persistent.

The expedition members have benefited in many ways from the experiences and the organisation of the venture, and we hope that the scientific work resulting will be of some value.

ACKNOWLEDGEMENTS

The expedition wishes to acknowledge the support and help of the Imperial College Exploration Board, the Royal Geographical Society, the organisations who financed the venture and the numerous firms and persons who have helped in so many ways.

APPENDIX A.

Food

A list of stores taken from this country and those obtained locally are tabulated below. Supplies were based on 140 man-days for 5 weeks in the field and 112 man-days for 4 weeks travelling. One meal a day was purchased where possible on the journeys.

Protein

Dehydrated meats	6 x 1½ lb.	Excellent.
Cooked minced beef	7 x 1 lb.	Good.
Kavli cheese	68 x ½ lb.	Excellent, 55 sufficient.
Ostermilk	6 x 1 lb.	Good.
M.M.B. Dried milk	10 lb.	Excellent.
Egg powder	4 lb.	Useful.
Marmite	3 x 4 oz.	Insufficient.
Oxo	4 x 1½ oz.	Insufficient.

Carbohydrate

Soup powders	120 x 2 oz.	Excellent.
Sugar	28 x 2 lb.	
Potato powder	12 x 8 oz.	Very useful.
Margarine	28 x ½ lb.	
Cooking fat	12 x ½ lb.	Insufficient - 18.