

OMANI-SWISS METEORITE SEARCH 2001-2003: PROJECT OVERVIEW. B. A. Hofmann¹, E. Gnos², A. Al-Kathiri^{2,3}, H. Al-Azri⁴, A. Al-Murazza³, ¹Naturhistorisches Museum der Burgergemeinde Bern, Bernastrasse 15, CH-3005 Bern, Switzerland, ²Institut für Geologie, Universität Bern, Baltzerstrasse 1, CH-3012 Bern, Switzerland, ³Directorate General of Commerce and Industry, Ministry of Commerce and Industry, Salalah, Sultanate of Oman ⁴Directorate General of Minerals, Ministry of Commerce and Industry, Muscat, Sultanate of Oman.

Introduction: During three field seasons in January-February 2001, December 2001-January 2002, and September 2002-January 2003 meteorites were collected in a joint project in the central deserts of the Sultanate of Oman with the aim to obtain a representative collection of meteorites from this area suitable for find and fall statistics analysis, to study the weathering of the meteorites, and to recover rare meteorites. Searching was performed visually from one or two 4WD vehicles by a group of 2 to 4 persons. During the first campaign we searched existing fields and areas nearby. Later on "new" areas were successfully explored. In total we invested approx. 1 man year in the search, completed 9600 search km in the desert and recovered approx. 3700 meteorite samples with a mass close to 1050 kg. Excluding obvious strewnfields, the recovered number of individual meteorites is approx. 150. Among these are one Martian (SaU 094), one Lunar (SaU 169), a small strewnfield of a primitive achondrite, one octaedrite (the first iron from Oman), and several unusual chondrites (3C, 1E, 1R). The mean mass of recovered meteorites (outside strewnfields) is 1125g (median= 179g). Including finds from the very large JaH 073 L6 strewnfield [1] and some other smaller strewnfields, the mean mass of all stones is 282g (median 33.5g). Test searches by foot indicate that this difference is not due to overlooking of small stones outside strewnfields. The median mass (excluding strewnfields) is larger than in Antarctic finds, when strewnfields are included the values are very similar. Based on this observation it appears possible that the abundance of small stones in the Antarctic collection may be mainly due to the presence of large numbers of paired stones from showers. The low abundance of irons in Oman (1 among several 1000 finds) may be a result of early human collection, rapid sinking in the soil due to high density, or a combination of these effects. In addition to meteorites, numerous soil samples were collected [2]. Our successful search campaigns demonstrate that large numbers of meteorites, including rare types, can be recovered during scientifically motivated searches in hot deserts at comparatively low cost.

References: [1] Gnos et al. (2003), *Meteorit. Planet. Sci.*, **38**, in prep. [2] Al-Kathiri et al. (2003) *Meteorit. Planet. Sci.*, **38**, in prep.