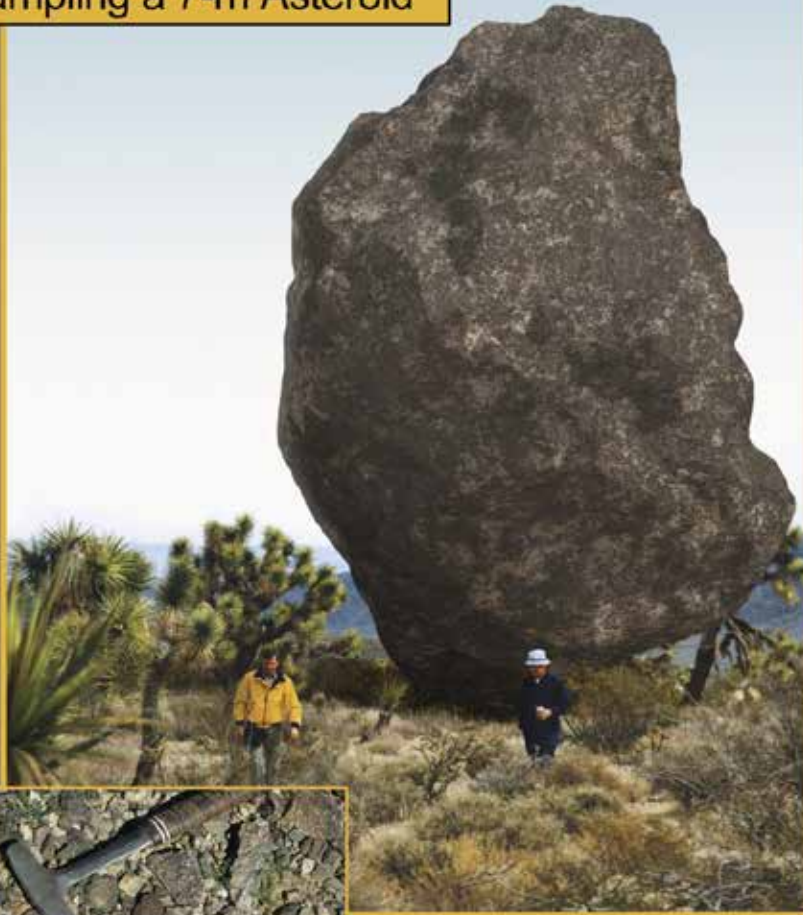


## Sampling a 7-m Asteroid



In 1995, the first fragments of a 6- to 8-meter diameter near-Earth asteroid (artistically reconstructed above) were discovered in Gold Basin, Arizona. The asteroid had exploded in the atmosphere, producing a 6-50 kiloton airburst, before showering the ground with fragments. Thousands of specimens (see inset) were recovered over an area of 225 square kilometers. They were relicts of the largest ordinary (L) chondritic asteroid ever documented on Earth until the Chelyabinsk event of 2013 occurred; that event involved a ~20-m diameter ordinary (LL) chondritic asteroid. The Gold Basin NEA was similar in size to that being targeted by a proposed asteroid redirect mission (ARM). See Krings et al. (*Meteoritics & Planetary Science* 36, 1057-1066, 2001) for details.

Artistic reconstruction by Daniel D. Durda.

Meteoritic samples of near-Earth asteroids (NEAs) include fragments of several NEA that exploded in the atmosphere.

The Gold Basin meteorites are fragments of a ~7-meter diameter NEA.

Several thousand relics of the asteroid were found in the desert, from which an artistic reconstruction was produced (left).

This object is similar in size to that being targeted by the Asteroid Redirect Mission (ARM).

For details, see Krings et al., *Meteoritics & Planetary Science* 36, 1057-1066, 2001.