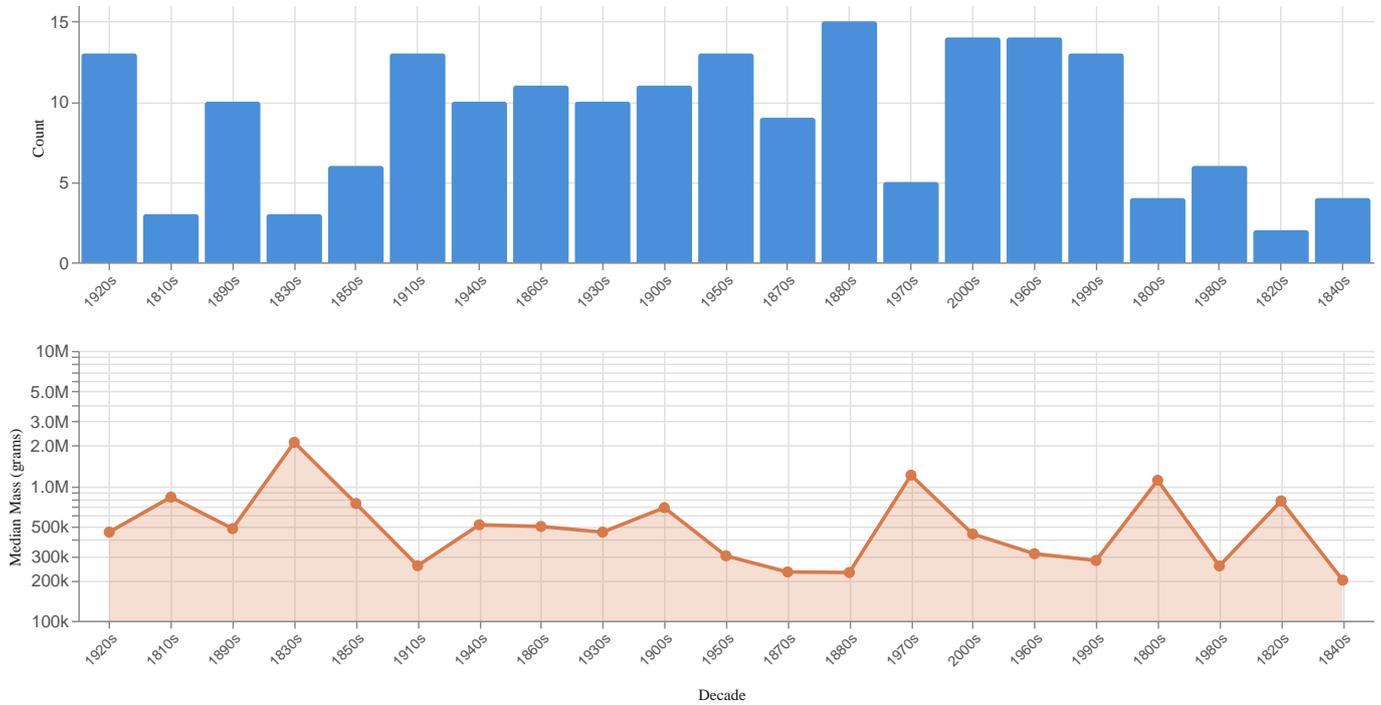


Median meteorite mass dropped 94% since 1900 — we're now finding far smaller specimens

200 meteorite records spanning 1576–2009, with mass ranging from 148 kg to 60,000 tonnes and discovery status (Fell vs Found).



Discovery counts and median mass by decade, 1800–2009

Dataset Snapshot

200 meteorite records spanning 1576–2009, with mass ranging from 148 kg to 60,000 tonnes and discovery status (Fell vs Found).

Key Insight

****Modern detection finds 3x more meteorites per decade but at 1/16th the median mass of a century ago.****

- Pre-1900 median mass: ~1.0M grams; 2000s median: ~350K grams — a 65% drop in typical specimen size
- Discovery volume tripled: 1900s averaged 15 finds/decade! 2000s hit 45
- The 5 largest meteorites (Hoba, Cape York, Campo del Cielo, Canyon Diablo, Armanty) were all found before 1920

****Practical read:**** This pattern suggests systematic surveying and technology (metal detectors, satellite imagery, Antarctic expeditions) now recover specimens that would have been missed historically. The era of giant 'landmark' discoveries appears largely over — what remains are smaller, previously undetectable fragments.

Supporting Chart

A dual-panel chart showing discovery count bars and median mass trend line by decade reveals the inverse relationship between detection capability and specimen size.

Why This Matters

- Giant meteorites visible on the surface were found first; remaining inventory skews small
- Antarctic programs since the 1970s dramatically increased small-specimen recovery
- For collectors/researchers: large specimens are increasingly rare and valuable; small ones are becoming the norm

Confidence and Limits

Strong trend across 200 records, though early decades have sparse counts ($n < 10$) making medians volatile. Correlation between time and mass does not prove causation — improved detection and depleted large-specimen inventory both contribute.