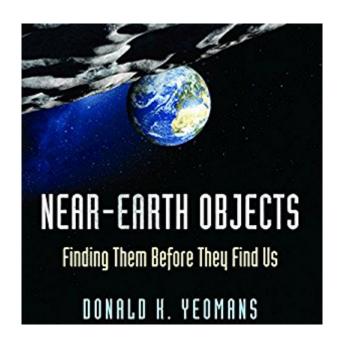
The book was found

# Near-Earth Objects: Finding Them Before They Find Us





## Synopsis

Of all the natural disasters that could befall us, only an Earth impact by a large comet or asteroid has the potential to end civilization in a single blow. Yet these near-Earth objects also offer tantalizing clues to our solar system's origins, and someday could even serve as stepping-stones for space exploration. In this book, Donald Yeomans introduces listeners to the science of near-Earth objects - its history, applications, and ongoing quest to find near-Earth objects before they find us. In its course around the Sun, the Earth passes through a veritable shooting gallery of millions of nearby comets and asteroids. One such asteroid is thought to have plunged into our planet 65 million years ago, triggering a global catastrophe that killed off the dinosaurs. Yeomans provides an up-to-date and accessible guide for understanding the threats posed by near-Earth objects, and also explains how early collisions with them delivered the ingredients that made life on Earth possible. He shows how later impacts spurred evolution, allowing only the most adaptable species to thrive - in fact, we humans may owe our very existence to objects that struck our planet. Yeomans takes listeners behind the scenes of today's efforts to find, track, and study near-Earth objects. He shows how the same comets and asteroids most likely to collide with us could also be mined for precious natural resources like water and oxygen, and used as watering holes and fueling stations for expeditions to Mars and the outermost reaches of our solar system.

### **Book Information**

Audible Audio Edition Listening Length: 4 hours and 21 minutes Program Type: Audiobook Version: Unabridged Publisher: Audible Studios Audible.com Release Date: November 14, 2012 Language: English ASIN: B00A7G76FO Best Sellers Rank: #87 in Books > Audible Audiobooks > Science > Astronomy #2741 in Books > Science & Math > Astronomy & Space Science > Astrophysics & Space Science #4883 in Books > Science & Math > Astronomy & Space Science > Astronomy

#### **Customer Reviews**

This book is jam-packed with useful and interesting information about asteroids and comets, whose significance is multifold. Thus, these objects are primordial, preserving in their composition the

conditions of the very beginning of our solar system; they were almost certainly instrumental in bringing the essential ingredients of life - water and carbon-based organic molecules - to Earth; and what they give they also take the away, since they are probably responsible for mass extinctions on this planet. The emphasis of the book is on those asteroids and comets that regularly or occasionally come into the vicinity of Earth's orbit, thereby posing a potential threat to our own continued existence. For me the most salient point made by the book - and repeatedly so - is that the most dire threat to Homo sapiens comes from long-period comets, since, even though they become "near-Earth objects" with far less frequency than asteroids, they tend to give us very little advance warning of their trajectory or even existence. Thus, if one happened to have our name on it, there would likely be insufficient time for us to prepare an adequate defense against it. Add to that fact that these objects will be traveling much faster than a typical in-coming asteroid and can also be huge, and you have the makings for humanity's ultimate catastrophe. Although Yeomans makes no bones about this sobering situation, his remarks throughout the book tend to be on the positive side. What he emphasizes is that, given a robust enough program of detecting near-Earth objects, we are in a position to defend against the vast majority of them even with present-day technology. Indeed, the achievements of the Spaceguard program and others in a very short period of time have been utterly impressive.

The premise of this book by Jet Propulsion Laboratory scientist Donald H. Yeomans is that of all of the threats to life on this planet, perhaps the most significant is a mass extinction coming from either a comet or asteroid impact. This seems all the more real because of the Chelyabinsk, Russia, event on February 15, 2013. In "Near-Earth Objects: Finding Them Before They Find Us" Yeomans offers a general audience an introduction to the science of near-Earth objects--especially the history, applications, and ongoing quest to find these celestial objects before they hit Earth. I was introduced to this reality twenty years ago at the annual meeting of this professional society when a noted scientist gave a presentation entitled "Chicken Little Was Right." He claimed that humans had a greater chance of being killed by a comet or asteroid falling from the sky than dying in an airplane crash. This is true, especially as one projects the risk over a very long period of time. Mathematical calculations confirm that every person alive today faces 1 chance in 5,000 that he or she will be killed by some type of extraterrestrial impact during his or her lifetime since several thousand meteorites, comets, and asteroids cross Earth's orbit, and many small pieces enter the atmosphere every day. One need only look at the craters on the Moon, and such wonders as Meteor Crater in Arizona, to verify the fact that solar system bodies make fine targets for comets and asteroids. More

than ever before, as Yeomans's makes clear, throughout history asteroids and comets have struck Earth with destructive consequences.

#### Download to continue reading...

Near-Earth Objects: Finding Them Before They Find Us Left Behind Series Prequel Set (The Rising, Anarchist is Born Before they were Left Behind/ The Regime, Evil Advances Before they were Left Behind/ The Rapture. In the Twinkling of an Eye Countdown to the Earth's Last Days) From Zero to Sixty on Hedge Funds and Private Equity 3.0: What They Do, How They Do It, and Why They Do The Mysterious Things They Do Essential Spices and Herbs: Discover Them, Understand Them, Enjoy Them The Common Core Mathematics Companion: The Standards Decoded, Grades 3-5: What They Say, What They Mean, How to Teach Them The Common Core Companion: The Standards Decoded, Grades 3-5: What They Say, What They Mean, How to Teach Them (Corwin Literacy) The Common Core Companion: The Standards Decoded, Grades 6-8: What They Say, What They Mean, How to Teach Them (Corwin Literacy) Working: People Talk About What They Do All Day and How They Feel About What They Do Demand: Creating What People Love Before They Know They Want It The Rapture: In the Twinkling of an Eye--Countdown to the Earth's Last Days (Before They Were Left Behind, Book 3) Seek and Find Can You Find Me? (Seek and Find Book) Finding Jesus: Six Holy Objects That Tell the Remarkable Story of the Gospels Look-Alikes Jr. : Find More Than 700 Hidden Everyday Objects Construction Delays, Second Edition: Understanding Them Clearly, Analyzing Them Correctly The Illustrated Guide to Chickens: How to Choose Them, How to Keep Them Rabbits: How to Take Care of Them and Understand Them (Complete Pet Owner's Manual) Help Them Grow or Watch Them Go: Career Conversations Employees Want The Cat Whisperer: Why Cats Do What They Do--and How to Get Them to Do What You Want Defeating Burglar Alarms: How They Work, and How Burglars Bypass Them Customer Satisfaction Is Worthless, Customer Loyalty Is Priceless: How to Make Customers Love You, Keep Them Coming Back and Tell Everyone They Know

<u>Dmca</u>