Millennium. Available for $86 (in NTSC, PAL, and SECAM formats).

The video **Populations on Earth** begins with a simple and important question – "Is the world overpopulated with people?" Using footage from over 20 countries around the world, the program traces the history of humankind from the days of *Homo sapiens* through the 21st century. Numerous examples illustrate the complexity of this issue, allowing viewers to sample facts and form opinions about the pros and cons of population growth.

The program is divided into four segments. The first segment presents a concise overview of human sociocultural history. Beginning with prehistory, the narrator describes how changes from hunter/gatherer groups to agricultural and industrialized societies contributed to longer life spans, specialization of labor, and declining death rates. Surprisingly, the video program does not limit itself to western civilization: it draws its examples from countries around the globe, including Egypt, South America, China, and the Middle East. I was fascinated by the similarities among cultures, and how cultural and social changes affected population growth, in some cases increasing it by a hundred fold!

The second and third segments provide evidence and theories that support both sides of the population growth debate. On one hand, scientists and citizens argue that the world is seriously overpopulated and that more people will only bring more problems in the future. Diminishing food supply, a limited natural resource base, and the accumulation of greenhouse gases are just a few of the facts presented to support this argument. On the other hand, there are those who challenge this view, claiming that more people also bring more hands and minds to improve the quality of life on the planet. They acknowledge that more people bring specific problems, but that these problems are being solved and that we are living longer and better lives. Examples that support this argument include higher living standards, decreasing pollution, lower infant mortality rates, and increasing wealth per capita. Citing Mark Twain, this camp believes that "The reports of my death [the Earth] have been much exaggerated."

The final segment focuses on one problem that is not easily solved – species extinction. As populations continue to grow, they impinge on the natural ranges of numerous species, including the Panda bear and Galapagos tortoise. Both camps of the population growth debate have different solutions to the problem, from halting destruction of native habitats to improving genetic engineering techniques so that plants can be more productive and species recovery is accelerated. Interestingly, the video has a strong stewardship message. Nowhere do they explore the possibility that animals and plants also have a say in the matter. Just look at the problems with cougars in the Pacific Northwest or bears in national parks. If we move too far into their ranges, they may just start looking for food in our cities and towns!

One thing that I appreciated about the video is its emphasis on balance. Equal time is devoted to exploring the population growth debate from both sides. The information is current and I could detect no apparent bias in the interpretation. However, I found myself wondering about the types of evidence presented to support each side of the debate. On the anti-population growth side, much of the evidence was scientific in nature. The video focused on research on pollution, global warming, and natural resources. For the other camp, the discussion focused more on sociological issues. Although I value research from both traditions, some viewers may find that this lack of scientific balance weakens the pro-population growth argument.

Aside from this balance issue, I found no other pitfalls in the video. It is well paced, engaging, and allows the viewer to make an informed decision in the end. By spanning the globe for examples, teachers will find the video useful in science and history classes. In fact, I plan to use it as an example for integrating scientific and historical discussions. After all, the science of today is the product of our current priorities. Someday, we may look back and see connections between society and science that eluded us in the past.

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DINOSAUR BIOLOGY

Dinosaurs 3D. 2001. Megasystems (5126 South Royal Atlanta Drive, Tucker, GA 30084). 1-888-GLASKAR/www.glaskar.com. CD-ROM. $34.95.

System Requirements

Operating System – Windows 3.11, Windows 95 or higher, Windows NT

- CPU – 486DX/66MHz
- RAM – 8 MB RAM (12 recommended) screen
- Screen Display – 256-color SVGS (16 bit recommended)
- CD-ROM Speed – 6x CD-ROM drive or better
- Available HD space – 8 MB or more
- Audio – Windows compatible sound card (8 bit recommended)
- Other – Mouse or other pointing device

Author's note: I ran **Dinosaurs 3D** on a 1.5 Ghz Pentium IV, 512 MB RAM, running windows XP (©2002) and it worked fine.

Dinosaurs 3D is an exciting, multimedia tour of the history of the dinosaurs and life on Earth. When first launched, this interactive CD-ROM greets the viewer with a long, informative summary of the contents of the disk. This introduction lasts about 4 minutes and, every time the disk was played, so did the introduction. Only after the fourth viewing was the preference found to turn it off. With that done, I was able to jump right into the table of contents, a pull-down menu on the left side of the screen.

This CD-ROM covers many aspects of dinosaur biology, myth and legend, and also gives a great survey of the different types of creatures that were alive throughout the time periods since life began. Starting with an overview of prehistoric life, the general information section covers the mythology related to dinosaurs (such as where did dragons come from?), how and when fossils were discovered, how dinosaurs evolved from simpler life forms, and a few of the different theories on extinction. This section also pays attention to the idea that at least some of the dinosaurs may have been warm-blooded.

From here, **Dinosaurs 3D** addresses the major time periods in Earth's history. Starting with the Precambrian Era and progressing through the Paleozoic, Mesozoic, and Cenozoic time periods, this CD-ROM gives the viewer excellent pictures and animations of many of the different life forms that existed, such as Diplodocus, Brachiosaurus, Tyrannosaurus Rex, and a variety of other prehistoric creatures. Also, a button brings up text related to the picture. This was very beneficial, as the information given in the caption was often quite superficial. There is also a handy search function which allows viewers to type in any word they see and get a definition, or be taken to that area of the CD for more information.

The interface of **Dinosaurs 3D** is quite user friendly. Main topics can be selected from either the pull-down menus or from a palette of thumbnail slides that appear relating to each topic. The viewer can then click on these thumbnails to see the bigger view. All of the time periods presented were described using a variety of hand-drawn graphics, actual photographs, and lively animations. The 3-dimensional computer-generated art is quite good and really gives the viewer the full view of the subject. In addition, on every screen there is a button to return to the main menu, print the current selection, turn the sound on or off, and quit the application.

One complaint about the program is that when the maximize button was clicked, the actual viewed portion of the screen didn't change, only the desktop disappeared. It would be nice to see some of these pictures and animations at the full width on a 19-inch screen. Secondly, this disk is produced only on Windows format. In this day and age of cross-platform CD-ROMs, Glaskar should not ignore the other half of the computer world, the Macintosh users.

Dinosaurs 3D would be beneficial to any student of prehistoric times in grades 7 and above. While younger students may enjoy the pictures and animations, they would have a hard time with some of the terminology and references. The disk was quite informative and I really learned much from it. The 3D animations really enhanced the experience. In the classroom this disk could be used as a reference tool, or as an enhancement to an already existing dinosaur curriculum. It does not provide sufficient information to be used by itself.

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