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Planet Earth

A new public television series, "Planet Earth," will premier on Wednesday, 22 January. A total of seven 1-hour episodes, to be shown at weekly intervals, will portray the tremendous advances that have occurred in earth and planetary science. Geologists and geophysicists who have seen the films are high in their praise of the series. And well they may be, for the authenticity of the content was intensively monitored by committees of the National Academy of Sciences. Nearly 100 of the nation's leading earth scientists participated in vetting the material. But there is more than authenticity in the series. There are high-quality entertainment and educational values for viewers from all walks of life. During the past 30 years, a revolution has occurred in earth science, made possible by new tools for exploration of the solid earth, the ocean depths, the atmosphere, the planets, and the sun. The studies have created knowledge. They have also provided marvelous photo opportunities.

WQED in Pittsburgh has chosen from among many existing film clips and has made others to produce an informative series of pictures that accompany a well-judged narrative.

The titles of the seven episodes are The Living Machine, The Blue Planet, The Climate Puzzle, Tales from Other Worlds, The Solar Sea, Gifts from the Earth, and Fate of the Earth. These titles do not always well convey the content. The Living Machine might better have been called The Restless Earth, for it deals with the history of the earth, plate tectonics, and related volcanism and earthquakes. The Blue Planet might have been called Oceanography, but that would not have conveyed the excitement of exploration of the ocean deeps. Tales from Other Worlds deals with lunar and planetary exploration and meteorite impacts. It includes a summary of highlights of the space effort and reviews recent findings relating to the Cretaceous-Tertiary extinctions.

The film will be shown on 22 January, The Living Earth, provides historical background before dealing with the recent findings. It tells of Hutton's late 18th-century observations that created the foundation for field geology. It also treats of Wegener's pioneering evidence for continental drift, set forth early in the 20th century. Then it describes the more recent work involving mapping of the Mid-Atlantic Ridge. Subsequently, magnetic observations on dated terrestrial basalts showed that the polarity of the earth's magnetic field reverses from time to time. Measurements made on mid-ocean basalts showed corresponding magnetic reversals at different distances from the Mid-Atlantic Ridge. These observations constituted conclusive evidence of sea-floor spreading. As a first episode in the seven-part series, The Living Earth is a particularly good starter. Its educational values are reinforced by its pictures. Volcanism and earthquakes provide marvelous photo opportunities that dramatize the violence and power of nature.

Creating a seven-part television series is an expensive undertaking. The costs were in excess of $4 million. That kind of money is not easily available for a science-based series. When "Planet Earth" is shown it will represent the culmination of efforts that began in 1979. The key enthusiast and idea man for the project was the late Hugh Odishaw, who was then dean of the College of Earth Sciences at the University of Arizona. Odishaw had been director of American endeavors for the International Geophysical Year (IGY) in 1957-1958. He was impressed with the many discoveries that had occurred since IGY and felt that the earth sciences had dramatic stories to convey to the public. Through enthusiastic salesmanship and sheer persistence, Odishaw lined up the sponsorship of six major scientific organizations, including the National Academy of Sciences, six relevant government agencies, and three foundations. These contributed more prestige than money, but their support in the early phases enabled Odishaw to develop further the feasibility of a "Planet Earth" series. Knowing of WQED's reputation and production expertise, he contacted WQED's executive vice president, Thomas Skinner, who recognized the potential of the theme and began working with Odishaw to develop the series. The major financing included $3 million from the Annenberg-CPB Project and $1 million from IBM.

One of the by-products of the "Planet Earth" series is a major hardcover book by the same name. This high-quality publication, which is a January selection of the Book-of-the-Month-Club, covers much of the content of the television series. It can be read with interest by scientists and the lay public.—Philip H. Abelson

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