

## We're Entering the Ecozoic Era, Now!

By F. Nelson Stover

**G**iven the transformations manifested on the planet within recent years, I believe Earth is entering a new era, a new mode of existence. Thomas Berry, among others, calls this emerging era the Ecozoic Era—a time when all species live in a mutually enhancing relationship with one another. Three factors are precipitating the transition from the Cenozoic to the Ecozoic Era. The transition to the Ecozoic Era is being fostered by: the global psycho-spiritual presence of the human species, the declining rate of production of fossil fuels, and the finite capacity of the planet's potable water supply.

### Human Presence

The human species now plays a critical role in self-consciously shaping the future of the planet. Never before in Earth's history has a single species had the physical capacity and the psychic presence to play such an active role in determining the unfolding directions of the future. The scale of human presence has increased almost six-fold since the beginning of the twentieth century. Of all the humans who have ever lived, more are alive today than have died—put another way, of all the human creatures who have ever lived on Earth, more than half are alive now. With the capacities of modern technology including telecommunications, mass production, large-scale construction, physical and bio-medical research and space exploration, the human species has amassed creative and destructive potentials unmatched by any single species in the history of the planet. In terms of psychic presence, the human species has obtained reflective capacities fostering cooperation and promoting discord on a global level as well as allowing understanding of patterns at the micro-cosmic and macro-cosmic levels.

### Energy

Creative new relationships to stored energy, such as oil and coal, and renewable energy drive the Ecozoic Era. Social dependence on fossil fuels is typified by an account from the early days of the oil age. During early June of 1887, 70,000 people poured into Findlay, Ohio to participate in an historic 3-day celebration.<sup>1</sup> Fifty-eight arches spanned Main Street, each adorned by hundreds of gas jets, each flanked by varicolored globes. Every principal street was piped with open jets which could turn the night into day. The entire spectacle was to celebrate the bonanza of the natural gas that had been tapped near the agricultural town of 4,633 people. In a speech at the height of the celebration, Professor Isaac



Newton Vail, an undisputed authority of his time, proclaimed that the gas belched from the molten center of Earth, where it was continuously being manufactured by nature. Indeed he claimed that the more it was used, the more would be generated by nature. For another century, human civilization continued to tap the stored up energies of the planet's fossil fuels as though their availability was unending.

While technology and research on a global scale continued to release ever increasing amounts of liquid and gaseous hydrocarbons during the early years of the twentieth century, the United States reached the limits of its annual productive capacities by the late 1970s.<sup>2</sup> Because of the way that the oil reserves are stored in the ground under the pressure of gas or water, simply drilling additional wells does not necessarily insure a proportional increases in production even in plentiful oil fields. By the early part of the twenty-first century, the global daily production rates have achieved or are approaching their natural limits.<sup>3</sup> In contradiction to the bold assertion of Professor Vail in Findlay, Earth is not, in any substantial way, producing additional fossil fuel reserves for use in the foreseeable future. Thus, economic growth patterns based on stored energy will no longer be possible for generations.

## Water

The realization of the need to preserve and enhance natural water supplies and their regenerative processes offers a doorway into large-scale cooperation and understanding across political boundaries and economic classes. One of the unique features of Earth, that which provides the unique Blue Marble appearance when seen rising over its moon's horizon, comes from the presence of liquid water on the surface of the planet, the water vapor in the air and the pools of aquifers within the rocky underground. Throughout the history of the human species, civilizations have flourished along the banks of the flowing fresh-water rivers and lakes. When the size of the human species was relatively small, adequate potable water was usually available to settled populations; or bands of humans were able to migrate from place to place as the availability of water changed. The problem now is that, while the size of the human species has increased greatly, the quantity of fresh water on the planet has not changed. In fact, for all intents and purposes, the quantity of fresh water now on Earth is the same as it was a thousand years ago, when human population was about 350 million. The production of substantial additional quantities of fresh water seems unlikely by either natural or artificial forces.

Marq de Villiers, in his book *Water*, reviews the global situation of nations and communities relative to their water resources. Like other authors and agency reports, he clearly documents how in country after country, entire river basins are becoming unusable to living creatures and how community after community has to rely on ever more costly means of water purification to meet even their basic needs. Indeed, he asserts, most if not all of the global unrest, especially in the Middle East, has more to do with the desire of citizens to have access to adequate and affordable water supplies, than to ideological differences or economic disparities.<sup>4</sup>

### Point of Transition to the Ecozoic Era

Throughout Earth's history, when energy levels and resource availability have reached insurmountable limits, modes of existence have changed and entire new eras have emerged. When the nutrient-rich seas became filled with living forms that depleted the stores of life-giving hydrocarbons, some creatures found ways to harness sunlight directly through photosynthesis and the eras of the plants began.<sup>5</sup> When the dinosaur population could no longer be sustained by decreasing fern resources, the mammals and the flowering plants established a mutual interaction that marked the beginning of the Cenozoic Era.



We are at a similar turning point. While the past holds invaluable lessons—both in terms of cultural patterns and practical skills—the conditions and understandings that allowed previous civilizations to flourish will never again suffice for coming generations. Now in the emerging Ecozoic Era, the human species, in interaction with the rest of the planet's systems, is inventing new ways of long-term growth and sustainable development. On a global scale, the creative elements of diverse societies are laying the foundations for the Ecozoic Era through their experimentations with practical lifestyle choices as well as their symbolic interpretations and artistic expressions.

<sup>1</sup> Hartzell Spence, *Portrait in Oil*, McGraw-Hill Book Company, 1962, p. 31ff.

<sup>2</sup> World Resources Institute, "Oil as a finite resource: When is global production likely to peak?", [www.wri.org/wri/climate/jm\\_oil\\_000.html](http://www.wri.org/wri/climate/jm_oil_000.html), March 2000.

<sup>3</sup> See [http://www.ems.org/oil\\_depletion/story.html](http://www.ems.org/oil_depletion/story.html) — Environmental Media Services, Jan. 6, 2003.

<sup>4</sup> Marq de Villiers, *Water*, Stoddart Publishing Company, 1999, p. 215 ff.

<sup>5</sup> Brian Swimme and Thomas Berry, *The Universe Story – From the Primordial Flaring Forth to the Ecozoic Era*, HarperSanFrancisco, 1992, p. 88.