The Cosmic Walk

This is a story, the story of the Cosmos. Mystery generates wonder and wonder generates awe. Today we take a glimpse at the beauty of our Cosmic Story, something of its deep mystery. It is the story of the universe, the story of Earth, the story of the human, the story of you and me.

1. **Great Emergence 13.7 billion years ago.**

Some 13.7 billion years ago, our Universe flashes into existence. Time, space, and energy become the gifts of being. The Universe expands and cools rapidly. Energy condenses into matter, sub-atomic particles, radical new beings with new powers, and they in turn transform into atoms of hydrogen & helium, new beings with new powers. *And the great mystery is there in the relationship.*

1. **One billion years later, galaxies emerge.**

Galaxies come forth. Stars are born, live, and die. Larger stars in their death throes explode and become supernovas. As they blast out into the cosmos, supernovas create in their wombs the elements of life.

1. **Two billion years later interstellar dust produces molecules.**

Within the interstellar dust these chemical gifts of the supernovas are nurtured into simple organic molecules, vital components for the later emergence of life.

1. **4.6 billion years ago, our grandmother star births the solar system.**

Our ancestral star gives herself into the transforming mystery of a supernova. Our Sun and a great disk of matter, all the planets and other members of our solar system family, emerge from the dispersed body of our grandmother star. Here begins the story of what will become one blue-and-white pearl of a planet.

1. **4.3 billion years ago, the Moon is born.**

Comets and meteorites pelt the Earth’s thickening crust as it cools off. Earth is impacted by a mars-sized planetoid that causes some of the outer layers of the molten Earth and planetoid to splash out into Earth’s orbit, solidifying into the Moon. The Earth’s relationship with the Moon and Sun will choreograph the exquisite dance of life.

1. **4.1 billion years ago, the miracle of rain.**

Earth, a privileged planet in its size and in its distance from the Sun, slowly cooled, and gradually formed an atmosphere. As steam condenses above the Earth, the miracle of rain and weather cycles begin. The first rain falls, then torrential rains fall on, and on, and on until rivers run over the land and pool into great seas.

1. **4 billion years ago, life emerges, first cells.**

Within the newly formed oceans a rich variety of chemicals gather together to birth the wonder of life in the form of bacteria. Earth comes alive.

1. **3.7 billion years ago, cells invent photosynthesis.**

Bacteria run out of free food supplies. They invent new ways to capture energy from the sun, which they then use to create new sources of food from water and simple minerals. In the process, however, they give off oxygen, a deadly corrosive gas that eventually piles up in the atmosphere and threatens life.

1. **2 billion years ago, oxygen-loving bacteria and the nucleated cell emerge.**

These tiny creatures invent respiration, breathing, a new source of energy for Gaia. In the process they also enter into communion with larger cells thereby protecting them from oxygen. This communion leads into the nucleated cell, the basis for the evolution of all complex life.

1. **1 billion years ago, sexual procreation emerges.**

Life was mysteriously drawn toward union, and the first single-celled organisms learn to share their genetic heritage and bequeath to their progeny an extravagance of possibilities.

1. **800 million years ago, multi-cellular life forms emerged.**

Single-celled beings relinquish their immortality and enter into a great variety of novel relationships creating multi-celled sexual beings, all still within the sea, and creativity expanded rapidly throughout the waters of Earth.

1. **600 million years ago, organisms begin to eat one another.**

Predator organisms arise, ones who have learned to use the complex bio-molecules of neighboring organisms, thereby saving their own genetic resources for the development of greater physical capabilities. Worms and jellyfish appear with the first nervous system.

1. **525 million years ago, sight is invented and fish emerge**

Light-sensitive eyespots evolve into eyesight. The Earth sees herself for the first time and the first fish forms with back bones, encasing the Earth’s earliest nervous system along with the development of her sensory organs.

1. **460 million years ago, plants and animals move on land.**

Leaving the water, animals such as worms, mollusks, and crustaceans, seek the adventure of breathing air, surviving weather, and raising themselves against gravity. Algae and fungi venture ashore as well, the first plants evolve as mosses.

1. **400 million years ago, insects invent flight.**

Insects evolve with nearly weightless bodies that permit them to take to the air as the first flying animals.

1. **335 million years ago, forests evolve.**

Over generations, these forests load themselves with carbon extracted from the atmosphere which later becomes fossilized as coal and oil.

1. **235 million years ago, dinosaurs emerge.**

Following the 4th and greatest mass extinction the dinosaurs emerged. For 170 million years, these creatures explore the extremes of size, speed, and strength. They also develop a new pattern unknown previously in the reptilian world—parental care.

1. **210 million years ago, mammals emerge.**

The first mammals, small and nocturnal, jump, climb, swing, and swim through a world of giants. Some rodent-sized insect-eaters evolve lactation, enabling mothers to spend more time in the nest keeping their young both fed and warm.

1. **150 million years ago, birds and flowers emerge.**

Birds evolve from certain dinosaurs, following the insects into the vast vault of the sky while Earth adorns herself magnificently in colorful and fragrant flowers, making themselves irresistible to insects, and thereby invites the sky creatures into a new dance.

1. **65 million years ago, the 5th mass extinction.**

An asteroid 6 miles in diameter hits the Yucatan peninsula leading in time to a severe drop in temperature, marking the end of the age of dinosaurs and the beginning of the age of mammals, known as the Cenozoic Era. With the dinosaurs gone, the once dark and sheltered small mammals stride into daylight moving quickly to occupy available ecological niches. Over the course of the next 60 million years Earth greets rodents, whales, monkeys, horses, cats and dogs, antelopes, gibbons, grazing animals, orangutans, gorillas, elephants, chimpanzees, camels, bears, pigs, baboons and the first humans.

1. **4 million years ago, Hominoids leave the forest, stand up and walk on two legs.**

The savanna offers the challenges and opportunities for these early creatures to evolve into humans. They move over the surface of the Earth eventually spreading themselves over all six continents.

* 100 thousand years ago, Modern Humans emerge. Language, shamanic and goddess religions, and art become integral with human life. Spirituality is born.
* 11,000 years ago, Agriculture is invented. Humans begin to shape the environment, deciding which species shall live and which shall die.
* 5,000 years ago, Classical Religions emerge. Hinduism, Confucianism, Judaism, Buddhism, Christianity, Islam.
* 260 years ago, scientists begin to calculate the Age of the Earth. Humans try to understand how old the Earth is through empirical observations.
* About 80 years ago, empirical evidence of an Expanding Universe is discovered. 43 years ago, scientists find evidence of the Origin of the Universe as they see the Primodial Flaring Forth.
* 40 years ago, Earth is seen as Whole from space. The Earth becomes complex enough to witness her own integral beauty. *And the great mystery is there in the Universe becoming conscious of itself.*

TODAY the story of the Universe is being told as our sacred Story. The Flaring Forth continues and the Great Mystery is here, as this moment, as us, as one.