

Evolution

ACCIDENTS OF CREATION

60 min; color; c,a
1/2" VHS **NC2152,VH**

The Secret of Life series - Examines DNA and its role in evolution, pointing out that mutations can have both beneficial and negative effects. Shows a group of plants in Hawaii which are on the verge of splitting into separate species, and a goose which is becoming extinct because its gene pool is no longer diverse. Considers how the same gene which provides protection from malaria can result in sickle-cell anemia in the next generation, and how a genetic mutation was responsible for the development of ruminant mammals. Discusses the differences between humans and chimpanzees, which hold 99% of their genes in common. Narrated by David Suzuki. *Closed Captioned.* (WGBHTV;BBC;FFHS;c1993)

Adaptation (Biology); Evolution; Genetics

THE AMPHIBIANS

30 min; color; h,c,a
1/2" VHS **NC1850,VH**

Life on Earth Series - Illustrates amphibian anatomical innovations that serve as adaptive strategies including an extendable tongue, eye blinking, and resonating chambers in the throat. Shows how amphibians partially succeeded in adapting on land, though they still show dependence on water for reproduction and have water-permeable skins. Suggests reptiles, next in the evolutionary line, were more successful in these adaptations. (WARNER;FI;c1981)

Amphibians; Evolution

APE MAN SERIES

THE HUMAN PUZZLE

50 min; color; c,a
1/2" VHS **NC2168,VH**

Walter Cronkite probes the comparatively recent evolutionary roots of human beings. For millions of years, dinosaurs dominated. Then came an evolutionary upheaval—the continents shifted, the climate changed, and the ape emerged. In Africa, our primal ancestors began to make huge biological leaps forward. Investigates the possible factors involved in separation of the human branch from other primates. (GRADA;A&EHOVI;c1994)

Evolution; Primates

GIANT STRIDES

50 min; color; c,a
1/2" VHS **NC2169,VH**

Walter Cronkite hosts an investigation of human evolution, emphasizing the development of upright locomotion, the invention of tools, the use of fire, and the development and refinement of the human brain. (GRADA;A&EHOVI;c1994)

Evolution; Primates

ALL IN THE MIND

50 min; color; c,a
1/2" VHS **NC2170,VH**

Walter Cronkite hosts an investigation of human evolution, emphasizing the role of language in bringing humans closer together and in promoting a higher form of creativity, as shown in examples of cave paintings, sculpture, and decorative tools. Questions whether the human mind will continue to guarantee evolutionary survival. (GRADA;A&EHOVI;c1994)

Evolution; Primates

SCIENCE & FICTION

50 min; color; c,a
1/2" VHS **NC2171,VH**

Walter Cronkite hosts an investigation of human evolution, emphasizing current theoretical concerns, debates between evolutionists and creationists, and speculations on the future of the human being. (GRADA;A&EHOVI;c1994)

Evolution; Primates

THE ASCENT OF MAN: A PERSONAL VIEW BY J. BRONOWSKI SERIES

Dr. Jacob Bronowski charts humanity's progress from the vantage point of the scientist/philosopher.

THE ASCENT OF MAN: A PERSONAL VIEW BY J. BRONOWSKI, NO. 1: LOWER THAN THE ANGELS

55 min; color; h,c,a
1/2" VHS **CA1321,VH**

Considers Dr. Bronowski's idea that evolution is twofold: biological and cultural. Explains that biological evolution is by adaptive mutation (selection, or the survival of the fittest) and is irreversible, while cultural evolution is by choice, or a series of choices, and can be changed. Points out that only in this respect does man differ from the other species: "Every animal leaves traces of what it was: man alone leaves traces of what he created." (TIMELIF;p1975)

Evolution; Science—History

THE ASCENT OF MAN: A PERSONAL VIEW BY J. BRONOWSKI, NO. 9: THE LADDER OF CREATION

55 min; color; h,c,a
1/2" VHS **CA1329,VH**

Opens in the home of Charles Darwin where Dr. Bronowski draws on the work of Malthus, Wallace, Pasteur, and others to demonstrate the importance of the linkage of life with chemical structure. Reviews experiments and observations which have corroborated theories on origins of life. (TIMELIF;p1975)

Evolution; Science—History; Scientists

THE BEGINNING OF LIFE

30 min; color; h,c,a
1/2" VHS **NC1839,VH**

Life on Earth Series - Illustrates the development of two essential biopolymers from the primal environment—proteins and nucleic acids. States the evolutionary proliferation of species occurs through mutations of single cell organisms such as those still found in Yellowstone Park and developed from symbiotic communities of protozoa. Shows early multi-cellular life that required size for its exploitation. (WARNER;FI;c1981)

Evolution; Life (Biology)

BEHAVIOR AND THE PROTEIN RECORDS

20 min; color; h,c,a
1/2" VHS **NC1783,VH**

Evolution Series - Analyzes how examples of similar behavior in different species can be explained only by common ancestry. Demonstrates the chromatographic technique for purifying and sequencing proteins. Illustrates the evolutionary history of life reflected in the structure of proteins. (FFHS;r1984)

Evolution

Evolution

BEYOND GENESIS: THE ORIGIN OF SPECIES

52 min; color; h,c,a

1/2" VHS **CC5028,VH**

Great Books Series - Examines the life of Charles Darwin and his theory of evolution. Describes the intellectual and theological climate in which his ideas developed, his fears of angering the Anglican Church, and the impact which the publication of his ideas had on science and society. Points out that the debate between creationism and evolution continues today, citing contemporary scientists and theologians. Discusses how the theory of evolution has been used in the past and the present, and delineates the differences between Darwin's ideas and Social Darwinism. Narrated by Donald Sutherland. (KILLEMA;FFHS;c1993)

Christianity; Creation; Evolution; Scientists

BIOLOGICAL SCIENCES SERIES

For descriptions see individual titles:

EVOLUTIONARY BIOLOGY [NC1603]

BIRTH OF LANGUAGE

60 min; color; c,a

1/2" VHS **EC2739,VH**

Explores the history and development of language from the time early humans began to communicate verbally, through the acquisition of speech in modern infants. Interviews anthropologists Sherwood Washburn and Jane Goodall regarding animal communication. Includes scenes of an ape using sign language, artwork of hominoids digging for food and making tools, and anatomical models of the speech mechanism. (HIGHROP;INSIGHM;c1986)

Communication; Evolution; Language acquisition

BROTHERS AND SISTERS: SIBLING RELATIONSHIPS

55 min; color; h,c,a

1/2" VHS **EC2923,VH**

Discusses the importance of birth order in the development of personality traits through an examination of evolutionary strategies for survival, interviews with several sets of siblings and with an only child, and excerpts from a lecture given by Frank Sulloway. Probes the emotional dynamics of the love-hate sibling bond as it occurs in small children as well as in adult and elderly people. Discusses the startling differences between siblings' personality traits as evolutionary survival strategies wherein interests and talents develop differently in order to split up the need for local resources. (ARMSTSO;FFHS;c1997)

Child study; Evolution; Interpersonal relations; Parent and child; Psychology

BURIED IN ASH

60 min; color; h,c,a

1/2" VHS **FC1797,VH**

Nova Series - Depicts Ashfall Site in Antelope County, near Royal, Nebraska, where complete skeletons of horses and rhinos have been excavated in a ten-foot layer of volcanic ash that probably came from Idaho about 10,000 years ago. Mike Vorhies, the paleontologist who made the original discovery, directs the dig in association with the University of Nebraska Museum. (WGBHTV; JLMVISU;c1994)

Paleontology; Volcanoes

THE CAVEMEN

50 min; color; c,a

1/2" VHS **CC5546,VH**

In Search of History Series - Looks at new findings that are challenging what we know about Neanderthals, cave dwellers who roamed the cliffs of Le Conte in southwestern France more than 70,000 years ago. Long synonymous with stupidity and animal savagery, the Neanderthals were thought to have died out 30,000 years ago. Harvard anthropologist Ofer Bar-Yosef is one of the scholars looking into the findings from the caves of France to high-tech DNA laboratories to determine if *Homo sapiens* exterminated *Homo neanderthalensis* or interbred with them. (FRANKDA;A&EHOVI;c1997)

Anthropology; Evolution; Paleontology

CHILDREN OF EVE

58 min; color; h,c,a

1/2" VHS **CC3612,VH**

Nova Series - Discusses the controversial theory that all human ancestry can be traced to a small group of females living in Africa 300,000 years ago. Investigates the new techniques of evolutionary biology in which the genetic maps of human beings past and present can be compared for molecular and genetic similarities. (WGBHTV;CORT;r1987)

Evolution

THE COMING OF THE INSECTS

30 min; color; h,c,a

1/2" VHS **NC1844,VH**

Life on Earth Series - Demonstrates that insects descended from the segmented millipedes which were among the first land colonizers and fed off the contemporaneously emerging forests. Includes silverfish, bees, flies and dragonflies as examples preserved for 200 million years in amber resin fossils from conifers in the Petrified Forest. Describes how insects are designed for flight with a wide variety of wing structures. Indicates that since flowers and insects co-evolved, insects adapted specialized anatomical equipment for pollination at the same time that flowers adapted the strategy of cross-fertilization. (WARNER;FI;c1981)

Evolution; Insects

THE COMPULSIVE COMMUNICATORS

30 min; color; h,c,a

1/2" VHS **NC1864,VH**

Life on Earth Series - Suggests that a high selective premium was placed on the development of language to enhance the effectiveness of the early hunter-gatherer tribes. Identifies early communication as being primarily facial rather than vocal, and probably innate rather than learned. Identifies the two stages of evolution that occurred the most rapidly as the discovery of agriculture and its settlement possibilities, and the discovery of writing. Provides information to support the continuous thread of development of various organisms in the history of nature from the first bacteria 3.5 billion years ago through man. Characterizes modern man as an information user with power over nature and a determining voice in what comes next in the process of evolution. (WARNER;FI;c1981)

Evolution; Language and languages

THE CONQUEST OF THE WATERS

30 min; color; h,c,a

1/2" VHS **NC1847,VH**

Life on Earth Series - Explains the development of the fish from the sea-squirt, an inconspicuous organism linked through embryological evidence to the present day lamprey, whose precursors date back 540 million years. Discusses how early fish, confronted by the problems of buoyancy and imprecise steering, survived by adaptations seen in the shark, the ray, and the bichir. Traces protofish with cartilage as they evolve into modern fish with bony skeletons. (WARNER;FI;c1981)

Evolution; Fishes

DARWIN'S DANGEROUS IDEA

120 min; color; c,a
1/2" VHS **NC2374,VH**

Evolution Series - Combines drama and documentary in this first episode of the series to examine the science of evolution and its effect on society. Uses dramatic reenactments to track Darwin's personal and professional conflict in the twenty years following the *Beagle's* voyage and before publication of his theory that would topple the prevailing worldview. Each of the five dramatizations ends with an epiphany or core evolutionary concept that launches a short documentary on the subject: a common ancestor, natural selection, complexity, God, and man. (WGBHTV;c2001)

Evolution; Science-History

DARWIN'S REVOLUTION IN THOUGHT

50 min; color; c,a
1/2" VHS **NC2186,VH**

Presents Stephen Jay Gould's definitive treatise on Charles Darwin in a lecture structured in the form of a paradox and three riddles about Darwin's life. Each is designed to shed light on one of the key features of the theory of natural selection, its philosophical radicalism, and the reasons why it has been so poorly understood. (DINOZRO;INTOTCL;c1993)

Evolution; Scientists

DIGGING DINOSAURS

30 min; color; h,c,a
1/2" VHS **FC1602,VH**

Documents the meticulous process of uncovering fossil fragments by focusing on two contemporary dig sites in Western Montana that have produced extraordinary new finds. Focuses on paleontologist Jack Horner's recent discovery of a dinosaur nesting ground which supports new theories about the biology and behavior of dinosaurs, including the theories that some dinosaurs lived in large, extended colonies and that many dinosaurs were warm-blooded. Visits the site of a dig headed by Dr. Peter Dodson in which a new species of horned dinosaur was discovered. Concludes with the assemblage of the new horned dinosaur. (WHYYTV;PBSV;p1987)

Archaeology; Paleontology

THE DINOSAUR AND THE COSMIC COLLISION

30 min; color; i,j,h
1/2" VHS **FC1586,VH**

Knowzone Series - Investigates the mystery of the extinction of the dinosaurs, theorizing that a meteor collision 65 million years ago may have caused the sudden extinction of many life forms. Hosted by David Morse. (WGBHTV;CORT;r1987)

Evolution; Paleontology

THE DINOSAURS AND THEIR DESCENDENTS

30 min; color; h,c,a
1/2" VHS **NC1852,VH**

Life on Earth Series - Examines the largest and most imposing land animals of all time, the early reptiles that dominated the earth for about 150 million years. Postulates two likely reasons for the immense size of dinosaurs as their reliance on stomachs rather than molars for processing food, and their need to modulate their internal temperatures with increased mass. Considers brontosaurus, stegosaurus, triceratops, and other species that it is suspected are extinct because of lower earth temperatures. Identifies crocodiles and iguanas among the closest surviving relatives of the dinosaur, revealing behavioral similarities to the ancient reptiles. (WARNER;FI;c1981)

Paleontology

THE DINOSAURS SERIES

Uses scientifically accurate animation, interviews with experts, and visits to museums and dinosaur digs around the world to tell the surprising story of the prehistoric creatures that dominated Earth for about 150 million years. Filmed in fifty locations on three continents, chronicles the history of the discoveries of dinosaur fossils and presents portraits of professional paleontologists, entrepreneurs, and amateur fossil hounds. Presents the latest theories of how, in an instant of geologic time, these prehistoric beasts and the world they inhabited vanished.

DINOSAURS, NO. 1: THE MONSTERS EMERGE

60 min; color; c,a
1/2" VHS **NC2095,VH**

Dinosaurs dominated Earth for 150 million years, yet no one knew of their existence until less than 200 years ago. Uses animation, archival materials, and narratives to chronicle the earliest finds, the earliest rivalries, and the explorations that led scientists to give this group of "terrible lizards" their own name—dinosaurs. *Closed Captioned*. (WHYYTV;PBSV;r1992)

Paleontology; Science-History

DINOSAURS, NO. 2: FLESH ON THE BONES

60 min; color; c,a
1/2" VHS **NC2096,VH**

Follows the recent discoveries about the nature of dinosaurs. Answers questions like: were dinosaurs slow-moving or speedy? Were they warm- or cold-blooded? How large were they? Did they eat plants—or each other? The answers come from ingenious research in the fields of biology, physiology, geology, and bio-mechanics. *Closed Captioned*. (WHYYTV;PBSV;c1992)

Paleontology; Science-Methodology

DINOSAURS, NO. 3: THE NATURE OF THE BEAST

60 min; color; c,a
1/2" VHS **NC2097,VH**

Examines the three successive geologic periods through which dinosaurs evolved. Almost half of the known species have been discovered or described in the past 20 years, and these discoveries are changing what is known about their habitats, family structure, nurturing practices, the ways they adapted, and why they're considered the most successful creatures ever to have lived. *Closed Captioned*. (WHYYTV;PBSV;r1992)

Evolution; Paleontology

DINOSAURS, NO. 4: THE DEATH OF THE DINOSAUR

60 min; color; c,a
1/2" VHS **NC2098,VH**

Explores one of the most exciting and hotly debated issues in science today: why the dinosaurs disappeared 65 million years ago. Considers several possibilities, including the latest hypothesis—that a giant asteroid struck the earth 65 million years ago and wiped out nature's giants. *Closed Captioned*. (WHYYTV;PBSV;r1992)

Evolution; Paleontology

Evolution

DIVERSITY OF LIFE

27 min; color; h,c,a

1/2" VHS **NC1562,VH**

Uses live specimens, models, paintings, and drawings to examine the diversity and evolution of life. Describes several methods of grouping organisms, then concentrates on the "five kingdom" system of classification: monerans, protists, fungi, plants, and animals. Shows representative specimens of each kingdom and some of their characteristics and habits, such as reproductive structures, types of reproduction, and methods of obtaining food. Includes mention of evolutionary advances such as the development of three levels of tissue, development of the coelom, and specialization of systems in organisms. *Honorable mention, 52nd Annual Exhibition 1982, Biological Photographic Association.* (INUAVC; INUISS;p1981)

Biology; Evolution

DNA AND THE EVIDENCE FOR EVOLUTION

20 min; color; h,c,a

1/2" VHS **NC1788,VH**

Evolution Series - Examines the structure and replicating processes of DNA and looks at the effects of genetic mutation. Demonstrates the Lederberg Experiment and reviews the evidence of fossils, structural and biological homologies, adaptation, and natural selection. (FFHS; r1984)

Evolution; Genetics-Experiments

DOGS AND MORE DOGS

60 min; color; h,c,a

1/2" VHS **NC2420,VH**

Explores the variations and behaviors found in dog breeds by looking at their genetics and evolution. Discusses two theories of the origins of dogs: that humans captured baby wolves and gradually tamed them, or that wolves themselves chose domestication, living near people and in increasingly complex relationship with them. Observes the great variation in coat colors, ear sizes, etc., and links them to varying levels of hormones. Points out that different dogs are bred for different jobs. Genetic diseases have been linked with various breeds, and genetic mapping may be used to prevent these particular problems. Includes animation, graphs, and interviews with dog owners. Interview Mike Levine of UC Berkeley, James Serpell and Karen Overall of the University of Pennsylvania, Ray Coppinger of Hampshire College, Patricia Coppinger of Wolf Park in Indiana, Robert Wayne of UCLA, Elaine Johnston, a Saluki breeder, Charlotte McGowan, a Papillion breeder, Harriet Ritvo of MIT, and Emmanuel Mignot of Stanford University. (WGBHTV; c2004)

Animals, Domestic; Evolution; Genetics

DROSOPHILA: BIOLOGY AND BEHAVIOR

25 min; color; c,a

1/2" VHS **NC2286,VH**

Evolution Series - Looks at the Hawaiian picture-wing fly, with 508 endemic species, a unique opportunity for the study of evolution. Some species are separated by only small differences in food, egg-laying, or mating preferences. Examines behavioral and physical differences in field and lab environments, and outlines scientists' ongoing efforts to preserve and protect this source of evolutionary information. (BBC;OPENUN; PENNSU;c1992)

Adaptation (Animals); Behavior genetics; Evolution; Insects

EARTH REVEALED SERIES

On a human timescale, geologic processes unfold very slowly. These changes are closely linked to human activity. Examines how Earth's dynamic interacting systems relate to the development of life and how they help us unlock the secrets of our environment.

EARTH REVEALED, NO. 11: EVOLUTION THROUGH TIME & NO. 12: MINERALS-THE MATERIALS OF EARTH

60 min; color; c,a

1/2" VHS **GC1672,VH**

Evolution Through Time chronicles the development of life on Earth. *Minerals: The Materials of Earth* covers the origins, classifications and uses of minerals.

(CCOMCTV;ANBERG;c1992)

Evolution; Mines and mineral resources

AN ECOLOGY OF MIND

60 min; color; c,a

1/2" VHS **CC4653,VH**

Millennium: Tribal Wisdom and the Modern World Series - Compares the Western desire to control nature with tribal cultures' more harmonious relationship. Examines the sophisticated ecological awareness of the Makuna of Colombia and how they transmit it from generation to generation through complex myths and rituals. Contrasts tribal peoples' views with the evolutionary ideas handed down to the modern world from the Bible and from 19th century Darwinian theory. Shows a modern gardener who exemplifies the new attitude Western culture will need to ensure humanity's survival on the Earth. *Closed Captioned.* (BINIMAP;KCETTV;PBSV;c1992)

Anthropology; Environmental protection; Evolution

EVOLUTION

45 min; color; c,a

1/2" VHS **NC2307,VH**

Great Minds of Science Series - Scientists have recently discovered that humans share almost 99% of their DNA with chimps, raising profound scientific, ethical, and philosophical questions. Discusses what it means to be human, and how much of our behavior is programmed into our genes. Dr. Jared Diamond, professor of physiology at UCLA Medical School and a recipient of a MacArthur "Genius" award, offers insights about what makes us human and what awaits us down the evolutionary road. (SCHOLJU;AMAZON;c1995)

Evolution

EVOLUTION AND HUMAN EQUALITY

42 min; color; c,a

1/2" VHS **NC1823,VH**

Features Stephen Jay Gould, who uses paleontology, evolutionary biology, genetics, history of science, and social history to present compelling evidence for human racial equality. Tells how racial differences have been misunderstood by scientists from pre-Darwinian days to the present to justify oppression, exploitation, and persecution. Describes how new genetic research on the evolution of mitochondrial DNA confirms the African origins of *Homo Sapiens* and the biological equality of the races. Concludes with a plea for students to understand the social and political power of scientific work and the scientist's responsibility to humankind. (INSIVI;c1987)

Anthropology; Evolution

Evolution

EVOLUTION: HUMAN ORIGINS--A WALK THROUGH TIME

30 min; color; c

1/2" VHS **NC2104,VH**

Retraces the development of bipedalism among hominids, looking at innovative studies of skeletal and muscle formation based on comparative anatomy between apes and humans. Questions whether human ancestors such as *Australopithecus afarensis* or the later gracile and robust forms were fully upright as it examines fossil evidence from sites in Laetoli, Afar and Transvaal. Reviews other hominid anatomical features such as dentition and cranial capacity and considers possible environmental influences on the evolution of bipedalism. (OPENUN;PENNSU;c1992)

Anatomy; Evolution; Paleontology; Primates

EVOLUTION: MAN TAKES A HAND

26 min; color; h,c,a

1/2" VHS **NC2106,VH**

Life Revolution Series - Explains that the consequences of gene splicing are unforeseeable and describes the scientific and governmental regulations under consideration; describes the sequencing of DNA and how the information gained from reading these sequences, and explains that cells activate only certain genes at certain times. Follows the scientific and economic history of interferon and Interleukin-2. (HARJONA;FFHS;c1990)

Biochemistry; Biotechnology; Evolution; Genetics

EVOLUTION OF MAN

20 min; color; h,c,a

1/2" VHS **NC1789,VH**

Evolution Series - Examines a large deposit of fossils 2.5 million years old in South Africa, containing fossils similar to humans, and compares the dimensions and structures of these fossils with modern humans. Looks at the relationship between climatic change at the time and how grasslands were formed. Talks about the apparent division in the evolutionary line. (FFHS;r1987)

Evolution

EVOLUTION SERIES

Presents a series of eleven programs that explain the theories of evolution and describes the techniques and experiments that support these theories. *For descriptions see individual titles:*

BEHAVIOR AND THE PROTEIN RECORDS

[NC1783]

DNA AND THE EVIDENCE FOR EVOLUTION

[NC1788]

EVOLUTION OF MAN [NC1789]

FOSSILS: PLANTS AND TETRAPODS [NC1780]

FOSSILS: REPTILES AND MAMMALS [NC1781]

HUMAN INFLUENCE [NC1786]

NATURAL SELECTION [NC1784]

RECORD OF THE ROCKS [NC1779]

SELECTION AND ADAPTATION [NC1785]

STRUCTURAL HOMOLOGIES AND

CO-EVOLUTION [NC1782]

EVOLUTION SERIES

DROSOPHILA: BIOLOGY AND BEHAVIOR

[NC2286]

SEXUAL SELECTION: WHY DO PEACOCKS

HAVE ELABORATE TRAINS? [NC2284]

EVOLUTION SERIES

DARWIN'S DANGEROUS IDEA [NC2374]

THE EVOLUTIONARY ARMS RACE [NC2377]

EXTINCTION! [NC2376]

GREAT TRANSFORMATIONS [NC2375]

THE MIND'S BIG BANG [NC2379]

WHAT ABOUT GOD? [NC2380]

WHY SEX? [NC2378]

THE EVOLUTIONARY ARMS RACE

60 min; color; c,a

1/2" VHS **NC2377,VH**

Evolution Series - Discusses the evolutionary competition between humans and microbes. Focuses on diseases such as tuberculosis, malaria, pneumonia, and gonorrhea, where certain strains have become resistant to antibiotics. Discusses Feline Immunodeficiency Virus (FIV), the equivalent of HIV in humans, which has been found in both domestic and wild cats. Researchers have found that wild cats seem to have adapted to the disease by mutation, providing hope that humans may adapt to HIV in the same way. Also briefly considers bubonic plague and symbiotic relationships between humans and bacteria. *Closed captioned.* (WGBHTV;c2001)

Diseases; Evolution; Immunology; Microbiology

EVOLUTIONARY BIOLOGY

16 min; color; h,c,a

1/2" VHS **NC1603,VH**

Biological Sciences Series - Presents the salient points of modern evolutionary theory, stressing the role of mutation and sexual reproduction in producing variation within populations. Examines theories of natural selection and random mutation to explain environmental adaptation. (CORT;c1981)

Evolution

EXTINCTION!

60 min; color; c,a

1/2" VHS **NC2376,VH**

Evolution Series - Explores the causes of the five mass extinctions that have occurred over the life of the planet. Investigates possible causes of extinctions occurring today, with emphasis on human influences. Discusses evolutionary theory and its predictions for the world humans leave to their descendants. (WGBHTV;c2001)

Evolution; Paleontology

THE FIRST AMERICANS, PART 1

20 min; color; j,h,c,a

1/2" VHS **CC2168,VH**

Examines the Bering Land Bridge Theory by using archaeological discoveries to trace the apparent migration of man from the Steppes of Central Asia to the North American continent in pursuit of game. Visits archaeological digging in the Kobuk River and Umnak Island areas, emphasizing the similarities of physiological characteristics and of tool making and use. Recaptures the various cultural atmospheres by recording remote natives hunting and fishing much as they have for thousands of years. (NBC;NLA;c1969)

Anthropogeography--North America; Archaeology; Indians of North America; Paleontology

THE FIRST AMERICANS, PART 2

32 min; color; j,h,c,a

1/2" VHS **CC2169,VH**

Follows the Bering Land Bridge Theory migration from Alaska to the Marmes Mon Rock Shelter in eastern Washington; then on south to the Murray Sprints site in Arizona; from there to Venezuela; and ending finally at Tierra Del Fuego, the tip of South America. Illustrates scientists creating replicas of the tools found at some archaeological diggings, emphasizing the highly developed skills necessary to fracture stone in a number of specific ways to create the variety of tools uncovered. Recaptures the various cultural atmospheres by illustrating techniques of hunting, fishing, shelter construction, and tool design. (NBC;NLA;c1969)

Anthropogeography--North America; Anthropogeography--South America; Archaeology; Indians of North America; Indians of South America; Paleontology; CLACS

Evolution

THE FIRST FORESTS

30 min; color; h,c,a

1/2" VHS **NC1843,VH**

Life on Earth Series - Explains how the first forms of aquatic life that began colonization on barren land were faced with overcoming the continuing limitations imposed by their marine origins. Describes how absolute and continuous dependence on water was solved by developmental changes. Identifies advances in reproductive fertilization with the emergence of the cycad and the coniferous seed. (WARNER;FI;c1981)

Adaptation (Biology); Evolution

FLOWERS AND INSECTS

30 min; color; h,c,a

1/2" VHS **NC1845,VH**

Life on Earth Series - Shows interdependent evolution as one of the results of the coming of flowers, when plants and insects began a symbiotic relationship that has shaped the evolutionary course of both. Discusses a variety of devices, incentives and interactions including the specificity of flowers' color, pattern and scent. Shows the necessity of the process of metamorphosis in insect development. Addresses specialized attractions in insects for purposes of reproduction, including color, scent, and rhythmic noise. (WARNER;FI;c1981)

Evolution; Flowers; Insects

FOSSILS: PLANTS AND TETRAPODS

20 min; color; h,c,a

1/2" VHS **NC1780,VH**

Evolution Series - Illustrates how fossilized plant remains are examined to determine their origin and studies the relationship between existing plants and early plant groups that might have been their ancestors. Explains some of the processes used to reconstruct the original forms of early animals. (FFHS;r1984)

Paleontology

FOSSILS: REPTILES AND MAMMALS

20 min; color; h,c,a

1/2" VHS **NC1781,VH**

Evolution Series - Reveals the fossil evidence showing the evolution of reptiles and amphibians. Demonstrates some of the field techniques for collecting and moving fragile fossils. Traces the possible evolution of some modern mammals back through time to ancient land reptiles. (FFHS;r1984)

Evolution; Paleontology

FROM REPTILES TO BIRDS

30 min; color; h,c,a

1/2" VHS **NC1853,VH**

Life on Earth Series - Traces the emergence of the snake, a species of burrowing, legless lizard with effective mechanisms for surface locomotion, mobility, and flexibility that it uses to stalk prey. Describes snakes as being advanced over other reptiles in several other areas including reproduction, communication, predation and the remote sensing of heat and odor. Documents how the structural modification of the reptilian scale to the bird's feather permitted colonization of the air through aerodynamic design, and insulation for heat control well before the era that brought the demise of dinosaurs. Explains reptilian structure was additionally modified to minimize weight for flight by replacing bony teeth and jaws with keratin beaks and bony tails with feathers. (WARNER;FI;c1981)

Evolution; Reptiles

THE GALAPAGOS ISLANDS

23 min; color; h,c

1/2" VHS **NC2336,VH**

Describes flora and fauna found on the Galapagos Islands, where Charles Darwin's studies of the ecosystem contributed later to his theory of natural selection. Defines terms like ecosystem and endemic, while relating these ideas to the context of the Galapagos Islands' evolution of its ecosystem. (HAWKHAS;c1998)

Ecology; Evolution

THE GENE HUNTERS

52 min; color; c,a

1/2" VHS **NC2404,VH**

Describes an ambitious but controversial scientific enterprise to collect the DNA of native peoples worldwide, before they disappear forever. Follows researchers contacting isolated tribes in South America's forests, deserts, and mountains, as well as in high-tech labs in the U.S. Poses fundamental questions about human origins and migration, native rights, medical ethics, and profit. (FFHS;c1994)

Ethics; Evolution; Genetics; Philosophy (CPI)

GENETICS SERIES

For descriptions see individual titles:

PATTERNS OF DIVERSITY [NC1813]

PATTERNS OF EVOLUTION [NC1814]

GOD, DARWIN AND THE DINOSAURS

60 min; color; h,c,a

1/2" VHS **NC1897,VH**

Nova Series - Chronicles the history of the creation-evolution controversy in the United States and examines the arguments put forth by the supporters of both views. Documents the "new" evidence in a debate between creationist Duane Gish and anthropologist Vincent Sarich and follows several scientists as they put the theory of evolution to the test. Explores the definition of science, reviews standards of scientific evidence, and discusses the importance of testing and debating theories within an established community of scientists. *Closed Captioned.* (WGBHTV;CORT;c1989)

Creation; Evolution

GODDESS OF THE EARTH

58 min; color; h,c,a

1/2" VHS **NC1767,VH**

Nova Series - Discusses the Gaia hypothesis that the biological evolution of life on earth affected the geological evolution of the planet. Studies the proposal of James Lovelock and Lynn Margulis that abiotic and biotic factors interact within a global system to create and sustain conditions favorable to the survival of living organisms. Provides evidence both supporting and criticizing the hypothesis. (WGBHTV;CORT;c1986)

Evolution; Science-Methodology

GREAT BOOKS SERIES

BEYOND GENESIS: THE ORIGIN OF SPECIES
[CC5028]

GREAT MINDS OF SCIENCE SERIES

EVOLUTION [NC2307]

Evolution

GREAT TRANSFORMATIONS

60 min; color; c,a

1/2" VHS **NC2375,VH**

Evolution Series - Examines the evolution of animals, emphasizing tetrapods. Follows research on the ancestry of whales, which are believed to have descended from four-legged animals. Discuss Charles Walcott's discovery of the Burgess Shale in the Canadian Rockies; fossils found here led to theories about the Cambrian explosion, when a great diversity of animals flourished. Compares primates such as lemurs and chimpanzees, who descended from the same ancestors as humans. Demonstrates how upright walking arose when primates left the trees and needed to free their forelimbs. (WGBHTV;c2001)

Evolution; Paleontology; Primates

HISTORY OF HUMAN POPULATION PARTS 1 AND 2

43 min; color; j,h,c

1/2" VHS **NC2354,VH**

Part 1: Outlines dominant theories of human evolution and adaptation, including discussion of paleolithic vs. neolithic social organization and migration to the Americas via the Bering Strait. Presents broad generalizations about natural resources and general movements of human populations. Part 2: Outlines dominant theories of population change, including growth and decline due to migration, birth/death rates, and disease. Presents generalizations about general movements of human populations, with a focus on Europe and the U.S. (NOLAMAL;NOLANSI;EDUCVN;c1997)

Emigration and immigration; Evolution; Paleontology; Population

THE HISTORY OF THE EARTH: OVER THE EONS

29 min; color; h,c

1/2" VHS **NC2338,VH**

Outlines the history of the Earth from the Precambrian Era to the present Cenozoic Era. Explores the geology, geography and animal and plant life in each era and/or period as well as the topic of extinction. (HILDEJE; SANLUVV;c1996)

Evolution; Geology; Paleontology; Physical geography

THE HOME PLANET

60 min; color; c,a

1/2" VHS **FC1707,VH**

The Miracle Planet series - Examines the prospects for continuing life on Earth. As humans developed into the dominant species on the planet, they have affected and been affected by the Earth. Questions whether the planet will continue to support the human species. (KCTSSEA; AMBROSV;c1989)

Earth; Evolution; Future studies

HOPEFUL MONSTERS

50 min; color; c

1/2" VHS **NC2349,VH**

Presents the history of and current studies in genetics and evolution. Profiles the research of Mike Levine and Bill McGinnis on the role of regulatory genes in the embryonic development of the fruit fly. Discusses homeotic or control genes, the Cambrian explosion of diversity in the evolution of organisms, gene manipulation and gene mapping. Includes critical opinions of gene manipulation and genetic research. (BBC;FFHS;c1998)

Evolution; Genetics-Experiments; Science-History

HOW SCIENTISTS KNOW ABOUT HUMAN EVOLUTION

18 min; color; j,h,c,a

1/2" VHS **NC2055,VH**

Introduces the principles of evolution and explains evolutionary theory by showing how scientists study human fossils and use them to draw conclusions about biological and cultural evolution. Demystifies the nature of scientific inquiry and demonstrates how science is a rational way of looking at and understanding the natural world. (NATCSEU;UCEMC;c1991)

Evolution; Science-Methodology

HOW SCIENTISTS KNOW ABOUT PUNCTUATED EQUILIBRIA

20 min; color; h,c

1/2" VHS **NC2056,VH**

Explores the development of a new theory that explains how evolution takes place, emphasizing that evolution, like gravity, is accepted scientific fact, though explanations of how and how quickly it happens are still being debated. The theory examined here disputes Darwin's idea of evolutionary gradualism, or the notion that new species arise through long, slow processes. In contrast, paleontologists Niles Eldredge and Stephen Jay Gould describe how fossil evidence indicates that new species usually evolve relatively quickly from ancestral ones (punctuations), and that species do not change significantly once they become established (equilibrium). (NATCSEU;UCEMC;c1991)

Evolution; Science-Methodology

HUMAN INFLUENCE

20 min; color; h,c,a

1/2" VHS **NC1786,VH**

Evolution Series - Examines the effect that man has had on the plants and animals that inhabit the world and how species are being changed by artificial selection caused by man's perceived needs. Gives reasons for preserving the gene pool. (FFHS;1984)

Ecology; Evolution

HUMAN LANGUAGE SERIES

THE HUMAN LANGUAGE EVOLVES "WITH AND WITHOUT WORDS"

55 min; color; c,a

1/2" VHS **EC2696,VH**

Explains the biological reasons why humans are the only animals who can speak language. Shows how human language is comprised of speech, body language, and visual signals and explores the differences in the way men and women talk with each other. Presents speculation by Stephen Jay Gould, Noam Chomsky, and others on how and when human language evolved. *Closed Captioned.* (EQUINOF; WAYSOFK;c1995)

Communication; Evolution; Language and languages

HUMAN NATURE

53 min; color; h,c,a

1/2" VHS **NC1945,VH**

A Planet for the Taking series - Examines, in depth, the origins of the human species, our common biological links with other life forms, and the evolutionary process that gave us the tools to dominate the planet. (CBC;F1; c1985)

Evolution

Evolution

THE HUNT FOR CHINA'S DINOSAURS

58 min; color; h,c,a

1/2" VHS **NC2045,VH**

Nova Series - Documents a scientific exchange program between teams of Chinese and Canadian scientists that led to the discovery of important fossils, providing evidence for theories about the environment, evolution, and behaviors of dinosaurs. Visits the team as they excavate and reconstruct fossils in the Gobi desert, the Canadian arctic, and the badlands of Alberta. Includes animation and claymation reconstructions that show how dinosaurs may have looked and acted in their different environments. (WGBHTV;CORT;c1991)

Paleontology

THE HUNTERS AND THE HUNTED

30 min; color; h,c,a

1/2" VHS **NC1860,VH**

Life on Earth Series - Follows the development of two independently evolving lines of hoofed grazing animals that depend on running from predators as an adaptive survival strategy. Points out that horses and zebras evolved to have an enlarged middle toe hardened into a hoof, while the other line of ungulates, which includes antelope, deer and gazelles, ran on two toes instead of one and consequently evolved cloven hooves. Describes different ways in which animals attempt to find safety from hunters. (WARNER;FI;c1981)

Adaptation (Animals); Evolution; Mammals

IN SEARCH OF HISTORY SERIES

THE CAVEMEN [CC5546]

IN SEARCH OF HUMAN ORIGINS 1: THE STORY OF LUCY

60 min; color; c,a

1/2" VHS **CC4892,VH**

Nova Series - In 1974 Don Johanson unearthed the fossilized skeleton of Lucy, at almost 3 million years of age our oldest human ancestor. Lucy's tiny three-and-a-half-foot skeleton set the world of paleoanthropology on its ear. Lucy walked upright and provided evidence that a larger brain was the key difference between early man and the ape. Johanson recounts his discovery of Lucy as he returns to the site of his find in Ethiopia and expounds upon the important information it still continues to generate. *Closed Captioned.* (JONESPE;WGBHTV;c1994)

Evolution; Paleontology

IN SEARCH OF HUMAN ORIGINS 2: SURVIVING IN AFRICA

60 min; color; c,a

1/2" VHS **CC4893,VH**

Nova Series - Anthropologist Don Johanson sets out to disprove the long-cherished view that early man's larger brain and reliance on technology are the by-products of the ability to hunt. He embarks on a journey across the Serengeti savanna of East Africa in search of food. He finds it—not by hunting but by scavenging the leftovers of lions and leopards. *Closed Captioned.* (JONESPE;WGBHTV;c1994)

Anthropology; Evolution

IN THE BEGINNING...THE CREATIONIST CONTROVERSY, PART ONE

60 min; color; c,a

1/2" VHS **NC2187,VH**

In the Beginning...The Creationist Controversy Series - Presents both sides of the debate between those who advocate creationist theory and those who support evolution. Features Darwinist Stephen Jay Gould, creationism lobbyists Mel and Norma Gabler, and other advocates. Looks at how school boards are handling the issue. Hosted by Randall Balmer. (WTTW;PBSV;c1994)

Creation; Evolution; School management and organization

IN THE BEGINNING...THE CREATIONIST CONTROVERSY, PART TWO

60 min; color; c,a

1/2" VHS **NC2188,VH**

In the Beginning...The Creationist Controversy Series - Presents the second half of a debate between those who advocate creationist theory and those who support evolution. Host Randall Balmer talks to Darwinist Stephen Jay Gould, creationism lobbyists Mel and Norma Gabler, and other advocates. Looks at how local school boards are handling the issue. (WTTW;PBSV;c1994)

Creation; Evolution; School management and organization

IN THE BEGINNING...THE CREATIONIST CONTROVERSY SERIES

IN THE BEGINNING...THE CREATIONIST CONTROVERSY, PART ONE [NC2187]

IN THE BEGINNING...THE CREATIONIST CONTROVERSY, PART TWO [NC2188]

THE INFINITE VARIETY

30 min; color; h,c,a

1/2" VHS **NC1838,VH**

Life on Earth Series - Demonstrates Darwin's theory of natural selection, supported with empirical evidence from South American rain forests and the Galapagos Islands. Suggests that fossil records from the Grand Canyon and Lake Superior, examined by radioisotopic and other methods of dating, indicate that life began at least 3.5 billion years ago. (WARNER;FI;c1981)

Evolution; Life (Biology)

INHERIT THE WIND

128 min; b&w; c,a

1/2" VHS **CB3474,VH**

Dramatizes the events surrounding the famous Scopes Monkey Trial where the conflict between science and religion came to a head. Stars Spencer Tracy, Fredric March, and Gene Kelly. Directed by Stanley Kramer. (LOMPI;ARTCI;c1960)

Christianity; Evolution; Feature films, American; Law

THE INVASION OF THE LAND

30 min; color; h,c,a

1/2" VHS **NC1849,VH**

Life on Earth Series - Shows how powerful ancestral dependencies on water were overcome to allow vertebrates to emerge from water to land environments. Uses the example of the modern mudskipper whose fins are similar to those of the lungfish and the coelacanth, a bony fish that lived 350 million years ago and was recently discovered to exist today. Identifies and provides examples of three amphibian groups which became at least partially adapted to land. (WARNER;FI;c1981)

Evolution; Vertebrates

IS THERE A CRISIS? BIODIVERSITY IN DECLINE

50 min; color; h,c

1/2" VHS **NC2398,VH**

State of the Planet Series - Documents struggles to save endangered animals, such as the Kenyan elephant and Oregon's spotted owl, and illustrates the causes of species extinction. Shows the connection between human behavior and the fate of plants and animals, such as the destruction of native species by those introduced by humans. Addresses the impact of global warming on plant and animal life. Documents the emergence of conservation programs around the world, such as the establishment of "peace parks" in Africa, to protect endangered animals. (FFHS;c2000)

Adaptation (Biology); Evolution; Wildlife conservation

Evolution

KITCHER-GISH DEBATE, PART 1 & 2

183 min; b&w; c,a

1/2" VHS **NB2012,VH**

Records a debate between Dr. Phil Kitcher, Professor of Philosophy of Science at the University of Minnesota, and Dr. Duane Gish, Associate Director of the Creation Research Institute in San Diego. Debates the motion: "That the creation model of origin provides better explanation of the characteristics of past and present living things than the evolution model." Part I introduces the moderator and participants and shows each debater delivering 50 minutes of evidence to support his point of view. Part II presents a ten minute rebuttal from each debater followed by five minute summation statements from each. (MINCPHS)

Creation; Evolution

KNOWZONE SERIES

For descriptions see individual titles:

THE DINOSAUR AND THE COSMIC COLLISION
[FC1586]

LANDMARK AMERICAN TRIALS SERIES

THE SCOPES MONKEY TRIAL, 1925 [CC6202]

THE LEAF EATERS

30 min; color; h,c,a

1/2" VHS **NC1859,VH**

Life on Earth Series - Demonstrates how forests 50 million years ago became a vast untapped food source for certain mammals that had been insectivores. Identifies adaptive strategies which solved survival and dietary problems for the newly vegetarian mammals including immobility, increased dexterity, longer legs, specialized toes, new cheek pouches, different storage habits, hibernation, foraging, and bark stripping. (WARNER;FI;c1981)

Adaptation (Animals); Evolution; Mammals

LIFE IN THE TREES

30 min; color; h,c,a

1/2" VHS **NC1861,VH**

Life on Earth Series - Demonstrates that grasping hands with opposable thumbs and binocular vision for depth perception are two requirements for an effective life in the trees. Identifies primates as possessing these characteristics. Discusses geographically widely dispersed monkeys which communicate with sound and often have well-structured social organizations to support their lives both on land and in the trees. (WARNER;FI;c1981)

Evolution; Primates

LIFE ON EARTH SERIES

Blends scientific data with wildlife photography in this series hosted by wildlife expert David Attenborough. Traces the development of life based on the principal theme that each species of organism found on Earth represents a particular solution to the problem of staying alive. Examines some of the adaptive strategies developed in evolution to solve this problem.

THE INFINITE VARIETY [NC1838]

THE BEGINNING OF LIFE [NC1839]

THE SEGMENTED INVERTEBRATES [NC1842]

THE FIRST FORESTS [NC1843]

THE COMING OF THE INSECTS [NC1844]

FLOWERS AND INSECTS [NC1845]

THE CONQUEST OF THE WATERS [NC1847]

THE INVASION OF THE LAND [NC1849]

THE AMPHIBIANS [NC1850]

VICTORS OF THE DRY LAND [NC1851]

THE DINOSAURS AND THEIR DESCENDENTS
[NC1852]

FROM REPTILES TO BIRDS [NC1853]

LORDS OF THE AIR [NC1854]

THE RISE OF MAMMALS [NC1855]

MARSUPIALS [NC1856]

THE LEAF EATERS [NC1859]

THE HUNTERS AND THE HUNTED [NC1860]

LIFE IN THE TREES [NC1861]

THE PRIMATES [NC1862]

UPRIGHT MAN [NC1863]

THE COMPULSIVE COMMUNICATORS [NC1864]

LIFE REVOLUTION SERIES

Examines the nature of genetic science, which promises to transform the air we breathe, the food we eat, the fuel we burn, the diseases we get, even human beings themselves. The promises and the dangers of genetic engineering and its scientific bases, are looked at. Each program focuses on a particular aspect of this revolutionary field.

EVOLUTION: MAN TAKES A HAND [NC2106]

SUPERANIMALS, SUPERHUMANS? [NC2115]

THE LIVING PLANET—A PORTRAIT OF EARTH BY DAVID ATTENBOROUGH SERIES

Presents David Attenborough as guide on a naturalist's tour of the world. Includes scenes filmed in 63 countries on all seven continents.

NEW WORLDS [NC1876]

LORDS OF THE AIR

30 min; color; h,c,a

1/2" VHS **NC1854,VH**

Life on Earth Series - Uses color motion photography from throughout the world to demonstrate the diversity among species of birds. Emphasizes that all birds lay eggs rather than carry them internally in order to divest themselves of extra weight. Demonstrates the variety of forms of winged flight resulting from differing adaptive strategies, all of which are both energy efficient and coordinated with feeding habits. Shows birds that have abandoned flight altogether to live on land in areas free of predators and where adequate food is available.

(WARNER;FI;c1981)

Adaptation (Animals); Birds; Evolution

Evolution

LUCY IN DISGUISE

58 min; color; c,a
1/2" VHS **CC4520,VH**

In 1974 one of the oldest, most complete, best preserved human ancestors was found in Ethiopia by Dr. Donald Johanson and a team of scientists—the International Afar Research Expedition. It took a team of experts and a multi-disciplinary approach to paleoanthropology to give her an age and context. For five years they analyzed the fossil finds from Ethiopia, and deduced that she lived 3.2 million years ago and was fully bipedal. But her head was primitive, shaped more like an ape than a modern human being. The scientists decided to name her *Australopithecus afarensis*. Describes the search for a better understanding of the beginnings of humankind in which scientists use a variety of techniques and instruments to provide a more accurate picture of the process of human evolution. (OHUNIV;SMELTZT;c1981)
Ethiopia; Evolution; Paleontology; Science—Methodology

THE MAKING OF MANKIND SERIES

Presents renowned anthropologist Richard Leakey tracing the origin of the human species in a production filmed all over the world. Explores long-hidden clues that lie buried in fossil records and interprets how humans developed. Probes how man acquired the evolutionary edge over other animals. Includes other specialists' opinions on the life and character of man's ancestors.

THE MAKING OF MANKIND, NO. 1: IN THE BEGINNING

60 min; color; c,a
1/2" VHS **CC3897,VH**

Explains how mankind's adaptable nature has contributed to the transformation from tree-dwelling, four-footed, vegetarian primates to upright, omnivorous toolmakers. Incorporates examination of the earliest known fossil beds in Turkana in East Africa. (BBC; AMBROSV;c1981)
Anthropology; Paleontology

THE MAKING OF MANKIND, NO. 2: ONE SMALL STEP

60 min; color; c,a
1/2" VHS **CC3898,VH**

Recounts anthropologist Mary Leakey's discovery of the oldest human footprints in the world which she unearthed near Olduvai Gorge in Tanzania. Points out that these footprints, made almost four million years ago, are the earliest evidence to date of the shift from four legs to two. Discusses the famous "Lucy" skeleton, Ethiopian fossils and the controversy over the nature of upright creatures. (BBC;AMBROSV;c1981)
Anthropology; Paleontology

THE MAKING OF MANKIND, NO. 4: BEYOND AFRICA

60 min; color; c,a
1/2" VHS **CC3900,VH**

Explores what happened to man's ancestors as they moved into colder regions of Europe and Asia more than a million years ago. Recounts at the famous site of Chou Koutien in China, the story of Peking Man, who used fire for heat and light and possibly for cooking. Explores the increasing intelligence of our ancestors. Meets a group of remarkable "talking" chimps and discusses how and why humans began to speak. (BBC;AMBROSV;c1981)
Anthropology; Evolution; Language acquisition; Primates

THE MAKING OF MANKIND, NO. 7: THE SURVIVAL OF THE SPECIES

60 min; color; c,a
1/2" VHS **CC3903,VH**

Questions if we owe our success in the evolutionary chain to the fact that humans are the only animals that began to use weapons. Considers the possibility that this legacy of aggression threatens our survival. Examines the behavior patterns that, over millions of years, made us what we are. Looks at new evidence that suggests that the human animal will survive. (BBC;AMBROSV;c1981)
Aggressiveness; Anthropology; Evolution

MAN ON THE RIM: THE PEOPLING OF THE PACIFIC SERIES

Portrays the history of the Pacific Rim countries, focusing on the historical and cultural backgrounds of this remarkable migration. Travels around and across the Pacific basin—from Tasmania to Tierra del Fuego, from Siberia to Easter Island—to trace the human and technological evolutions. Points out that the global economic center of power is shifting to the Pacific and the people of the Rim are emerging as a major force in world affairs.

MAN ON THE RIM: THE PEOPLING OF THE PACIFIC, NO. 1: FIRST FOOTSTEPS

60 min; color; j,h,c,a
1/2" VHS **CC4319,VH**

Establishes the concept of the evolving human species spreading out from Asia during and since the last Ice Ages, into all the lands in and around the Pacific Ocean. Discusses the human race emerging in Asia, with Peking man and Java man as the two contrasting symbols of our earliest presence in this eastern half of the world. The settlement of two divergent groups in Australia and the Americas points to the great expansion of the human race. (DEMIMON;LAEM;c1988)
Anthropology; Asia; Evolution; Paleontology

MARSUPIALS

30 min; color; h,c,a
1/2" VHS **NC1856,VH**

Life on Earth Series - Develops the principle of evolution that lines of animals subject to the same selective pressures tend to evolve in similar ways. Shows marsupial analogues for animals in both Australia and North America including flying squirrels, anteaters, rodents, cats and wolves which are identical in appearance and behavior but evolved separately. Demonstrates similar parallels between marsupial and placental animals. Features the kangaroo as a unique marsupial form which evolved from smaller forest dwellers. Shows it to be well adapted to the desert, to its need for efficient locomotion by jumping, and to the reproductive needs of its environment where the mother is capable of simultaneously maintaining three offspring in different stages of development throughout her reproductive years. (WARNER;FI;c1981)
Evolution; Mammals

MILLENNIUM: TRIBAL WISDOM AND THE MODERN WORLD SERIES

Journey with anthropologist David Maybury-Lewis into the lives and cultures of people from all corners of the earth to explore values essential to human life—harmony, humility and tolerance. Celebrates our similarities and differences as human beings and explores what we can learn from today's tribal societies and from each other. AN ECOLOGY OF MIND [CC4653]

Evolution

THE MIND'S BIG BANG

60 min; color; c,a

1/2" VHS **NC2379,VH**

Evolution Series - Considers the evolutionary development of the human brain, following the progression of primates from hominids to neanderthals. Looks at ancient cave paintings, believed to be humankind's first attempt at art and creativity, and explores a "tool-making factory" found in the Great Rift Valley of Africa, where tools improved survival. Also discusses language acquisition and the development of culture. (WGBHTV;c2001)

Brain; Evolution; Paleontology

THE MIRACLE PLANET SERIES

Narrated by Bill Kurtis, this six-part series is a breathtaking voyage through the history of our world. Combines American scientific theory with a Japanese sense of aesthetics to look at the Earth.

THE HOME PLANET [FC1707]

NATURAL SELECTION

20 min; color; h,c,a

1/2" VHS **NC1784,VH**

Evolution Series - Supports the theory of continental drift and the one-time existence of a super-continent. Discusses how isolation gives rise to different species and how species develop in response to their environments. (FFHS;r1984)

Evolution; Natural selection

NEW WORLDS

60 min; color; h,c,a

1/2" VHS **NC1876,VH**

The Living Planet—A Portrait of Earth by David Attenborough series - Speculates on the possible future of the earth. Discusses how man has changed the face of the planet in many ways, causing willful damage and destruction while at the same time creating new habitats for plants and animals. Identifies adaptability as the key to survival. (BBC;AMBROSV;c1984)

Evolution; Future studies

NOVA SERIES

For descriptions see individual titles:

BURIED IN ASH [FC1797]

CHILDREN OF EVE [CC3612]

GOD, DARWIN AND THE DINOSAURS [NC1897]

GODDESS OF THE EARTH [NC1767]

THE HUNT FOR CHINA'S DINOSAURS [NC2045]

IN SEARCH OF HUMAN ORIGINS 1: THE STORY OF LUCY [CC4892]

IN SEARCH OF HUMAN ORIGINS 2:

SURVIVING IN AFRICA [CC4893]

STEPHEN JAY GOULD: THIS VIEW OF LIFE [NC1882]

T. REX EXPOSED [NC2047]

PATTERNS OF DIVERSITY

25 min; color; h,c

1/2" VHS **NC1813,VH**

Genetics Series - Discusses the current controversies surrounding the theory of evolution, including the concept of random molecular drift of individual proteins versus an organism's response to changes in the environment. Considers ways in which such changes might be incorporated in the genetic material. (BBC;CORT;r1987)

Evolution; Genetics

PATTERNS OF EVOLUTION

25 min; color; h,c

1/2" VHS **NC1814,VH**

Genetics Series - Highlights field studies in evolutionary biology, which concerns the dynamic interaction between organisms and their environment. Considers the common forces operating in different habitats that give rise to the diversity of living forms. Suggests ways in which organisms may select, modify, and transform their environments, setting the stage for their own evolution. (BBC;CORT;r1987)

Evolution; Genetics

A PLANET FOR THE TAKING SERIES

Reveals the paradox existing in our relationship with nature. Shows how humans have tried to master nature instead of working with it, a tendency that could result in the destruction of all living things. Explains how, simultaneously, technology yields insights into mysteries of matter and life. Illustrates that survival is inextricably bound to a healthy environment. *For descriptions see individual titles:*

HUMAN NATURE [NC1945]

PREHISTORIC HUMANS

17 min; color; j,h,c,a

1/2" VHS **NC2036,VH**

Presents an overview of the several prehistoric stages in the development of modern man during different periods and in different places. Portrays hominids using artwork and live-action re-enactments. Traces the physical changes in the development of prehistoric man during different periods and in different places. Covers the development of the use of tools, fire, and language. Emphasizes the characteristics of man at each stage rather than the evolutionary process. (CBS;PHOENIX;c1980)

Evolution; Paleontology

THE PRIMATES

30 min; color; h,c,a

1/2" VHS **NC1862,VH**

Life on Earth Series - Asserts that Asian and African apes demonstrated pre-adaptive behavior by leaving the jungle to colonize the plains, which resulted in their evolution into humans. Traces the development of apes as animals that swing by their arms in trees rather than leap from branch to branch like monkeys, and shows the consequent anatomical changes. Identifies orangutans and gibbons as surviving Asian apes, and gorillas and chimpanzees as modern African apes. Describes the life styles, social orders, activities, and habits of these primates. (WARNER;FI;c1981)

Evolution; Primates

RECORD OF THE ROCKS

20 min; color; h,c,a

1/2" VHS **NC1779,VH**

Evolution Series - Looks at the process of sedimentation in the Grand Canyon and the stratified evidence that simple organisms developed first, followed by more complex forms of life. Examines and describes some techniques for dating rock samples. (FFHS;r1984)

Evolution; Geology; Paleontology

Evolution

THE RESTLESS EARTH SERIES

Explores the geological theory of "plate tectonics", which maintains that the earth's crust consists of constantly shifting plates and also supports the popular idea of drifting continents. According to this theory, the movement of these plates is responsible for earthquakes, volcanoes, and the formation of mountains. This production, originally broadcast as a two hour program, was filmed in 16 countries and has been divided into the series of four films described below.

THE RESTLESS EARTH: EVIDENCE FROM ANCIENT LIFE

11 min; color; h,c,a

1/2" VHS **FC1296,VH**

Examines the relationship between plant and animal evolution and the history of the earth's more prominent changes. Observes that considerable change to living things occurred when the continents last came together into one large mass and that many animals became extinct when this super-continent last broke apart. Notes that plant and animal life on earth may date as far back as 3400 million and 600 million years respectively. (WNET/13;INUISS;p1972)
Evolution; Geology; Paleontology

THE RESTLESS EARTH: GEOLOGY AND MAN

19 min; color; h,c,a

1/2" VHS **FC1298,VH**

Observes that animal life on earth began to evolve more than 100 million years ago and considers what effect man may have on future geological history. Shows that at the present rate of consumption man is exhausting ores that have taken millions of years to accumulate and producing carbon dioxide faster than the oceans can absorb it. Records that the oldest rocks in the world are found in Greenland and describes how they help to tell the history of the earth. (WNET/13;INUISS;p1972)
Geology; Paleontology

THE RISE OF MAMMALS

30 min; color; h,c,a

1/2" VHS **NC1855,VH**

Life on Earth Series - Stresses that the fundamental mammalian features of endothermy, body fur, and breast-feeding cannot be traced in the fossil record but can be inferred only from other lines of evidence such as skull and tooth structure. Describes the first mammals which appeared 200 million years ago as small and nocturnal and thereby able to compete with dinosaurs. Indicates these mammals ultimately radiated into marsupials and placentals, two main lines which differ in reproductive strategy. Discusses the earliest marsupials whose females carry their immature young in a nurturing body pouch. Starting with 60-million-year-old fossils found in South American, explains marsupials' spread to other continents, primarily Australia. (WARNER;FI;c1981)
Evolution; Mammals

THE SCOPES MONKEY TRIAL, 1925

52 min; color; h,c,a

1/2" VHS **CC6202,VH**

Landmark American Trials Series - Summarizes the events and circumstances of the 1925 Scopes "monkey trial" in the small town of Dayton, Tennessee. Explains that the Butler Law made teaching evolution in public schools in Tennessee illegal, and thus provided a good opportunity to set up a case into which the ACLU could intervene and appeal to the Supreme Court in order to articulate Constitutional rights that they believed were being violated by this law: freedom of speech, freedom of religion, and separation of church and state. Profiles renowned attorneys who argued this case, William Jennings Bryan and Clarence Darrow, and recounts the larger and continuing national debate over the places of science and religion in public education. (INSIGHM;c1998)

Education-History; Evolution; Law; U.S.-Constitution

THE SECRET OF LIFE SERIES

ACCIDENTS OF CREATION [NC2152]

THE SEGMENTED INVERTEBRATES

30 min; color; h,c,a

1/2" VHS **NC1842,VH**

Life on Earth Series - Discusses segmented worms, trilobites, and crustaceans, three invertebrate fossil groups considered to be related by virtue of appearance. Shows that segmentation may have developed as an aid to burrowing. Identifies trilobites as a form with sophisticated compound eyes which flourished and became extinct about 250 million years ago. Identifies the dominant extant line of segmented marine invertebrates as the crustaceans which are characterized by tubular limbs that operate through the hinged joints of their exoskeletons. (WARNER;FI;c1981)

Evolution; Invertebrates

SELECTION AND ADAPTATION

20 min; color; h,c,a

1/2" VHS **NC1785,VH**

Evolution Series - Looks at natural selection—the survival of the fittest—and how environmental constraints affect who or what will survive. Explains that the inheritance of the variations of the species that survived is passed down through the generations and results in a population most of which has improved its adaptation to the environment. (FFHS;r1984)

Adaptation (Biology); Evolution; Natural selection

SEXUAL SELECTION: WHY DO PEACOCKS HAVE ELABORATE TRAINS?

25 min; color; c,a

1/2" VHS **NC2284,VH**

Evolution Series - Researchers at the Whipsnade Zoo in Great Britain determine through scientific reasoning that the purpose of the male peacock's train is to attract females. Explores what the male might gain or lose from carrying such a long train. Shows the scientific research method in action. (BBC;PENNSU;c1992)

Adaptation (Animals); Birds; Evolution; Science-Methodology

STATE OF THE PLANET SERIES

IS THERE A CRISIS? BIODIVERSITY IN DECLINE [NC2398]

STEPHEN JAY GOULD: THIS VIEW OF LIFE

57 min; color; h,c,a

1/2" VHS **NC1882,VH**

Nova Series - Profiles Harvard paleontologist Stephen Jay Gould. Shows him in a variety of settings as he offers his views on hominid evolution, Darwin, apartheid, and other topics. (WGBHTV;AMBROSV;c1984)

Paleontology; Scientists

THE STORY OF EVOLUTION

18 min; color; j,h

1/2" VHS **NC2423,VH**

Provides background information on the theory of evolution, starting with its roots in Ionian philosophy. Explains Darwin's work on *The Origin of Species*, as well as contemporary refinements to it. Includes discussion of the controversy surrounding this theory and the 1925 Scopes "Monkey Trial." (HAWKHAS;c2002)

Evolution

STRUCTURAL HOMOLOGIES AND CO-EVOLUTION

20 min; color; h,c,a

1/2" VHS **NC1782,VH**

Evolution Series - Details why and how the evidence of structural homologies between a variety of vertebrates, insects, and plants points to a common ancestry. Explains how fossils illustrate the development of more elaborate structures from simpler forms—the evidence for coevolution. (FFHS;r1984)

Evolution; Paleontology

Evolution

SUPERANIMALS, SUPERHUMANS?

26 min; color; h,c,a

1/2" VHS **NC2115,VH**

Life Revolution Series - Presents the phenomenon of "superanimals," patented animal species such as the "geep"—part goat, part sheep—which have been genetically engineered to take advantage of the best traits of two or more species. Questions whether the human species might undergo biological engineering, as women can already to some extent select the genetic profiles of the children they choose to bear. Considers some of the ethical and economic dilemmas intrinsic to genetic engineering, such as the question of who owns an individual's DNA. (HARJONA;FFHS;c1990)

Ethics; Evolution; Genetics; Philosophy (CPI)

T. REX EXPOSED

58 min; color; h,c,a

1/2" VHS **NC2047,VH**

Nova Series - Examines the science and lore surrounding the famed Tyrannosaurus rex on the occasion of a discovery in Montana of the first nearly complete T. rex skeleton ever found. Uses modern technology to unravel some of the mysteries regarding T. rex's locomotion and functional morphology, including how it used its tiny arms, how fast it could run, and whether it was a predator or a scavenger. Discusses theories of dinosaur extinction and evolutionary relationships. Considers how popular depictions, of which tyrannosaurus is the most popular, affect the scientific study of dinosaurs. (WGBHTV;CORT;c1991)

Paleontology

THREE DOMAINS AND THE TREE OF LIFE

27 min; color; h,c,a

1/2" VHS **NC2353,VH**

Presents the "Tree of Life" concept of genetic structure of domains within evolutionary biology. Includes discussion by Scott Freeman on the historical development from Linnaeus' basic ideas on taxonomy and binomial nomenclature to the use of DNA in assessing relationships among organisms. Introduces important scientists, methods, and theories which underlie the theory of "three domains" used today (Archaea, Bacteria, and Eukarya). Includes a discussion by Jane Goodall on the close genetic relationship between chimpanzees and humans. (WINTPAT;WINPATR;FLMIDEA;c2001)

Biology; Evolution; Science—History

THE TIMELESS ISSUE OF LIFE: EVOLUTION OR CREATION

66 min; color; h,c,a

1/2" VHS **NC1695,VH**

Examines the origins of man from both the creationist and the evolutionist viewpoints. Discusses the origin of the universe, the age and formation of the earth, the origin of life, how life has changed, "micro" and "macro" evolution, the emergence of man, the man and ape controversy, and fossils and transitional forms. (TQP;CLPV;p1982)

Creation; Evolution

UPRIGHT MAN

30 min; color; h,c,a

1/2" VHS **NC1863,VH**

Life on Earth Series - Traces the biological roots of humans to the African plains five to ten million years ago, characterized by apes' good vision and agile hands, as well as their effectiveness at communication. Notes that upright posture was essential to protection, using tools, and hunting. Observes that humans developed from primitive hunter-gatherer tribes into complex agricultural and technological societies, colonizing the entire globe with virtually no predators but microbes. Explains the ice age required humans to find shelter, use fire for heat and cooking, and create clothing. Presents evidence which shows that the human species has not undergone substantial biological evolution during the past 35 thousand years. (WARNER;FI;c1981)

Evolution; Primates

VICTORS OF THE DRY LAND

30 min; color; h,c,a

1/2" VHS **NC1851,VH**

Life on Earth Series - Describes how reptiles eliminated impediments to land colonization that restricted the adaptive range of amphibians. Shows how watertight skin allows reptiles such as tortoises, iguanas, and chameleons to endure extreme heat through ectothermic temperature regulation. Explains how an egg allows for the delivery of sperm so that fertilization occurs internally before the developing embryo is encased in a tough, water-tight egg shell and deposited in a nest. (WARNER;FI;c1981)

Evolution; Reptiles

WALKING WITH DINOSAURS

180 min; color; h,c,a

1/2" VHS **NC2402,VH**

Uses computer animation to recreate the look, movement, sound, and evolving environment of dinosaurs from their evolution, to their domination of Earth, and to their eventual destruction. Program 1 "New Blood" begins 220 million years ago in the late Triassic Period, when dinosaurs first appears on the land mass, Pangea. Program 2 "Time of Titans" picks up 152 million years ago, in the late Jurassic Period, and focuses on the fossils found in the Morrison Formation, now part of the western United States. Finds evidence for a wetter seasonal climate and increasing size in dinosaurs. Program 3 "A Cruel Sea" continues the late Jurassic Period around 149 million years ago, when vast, shallow seas were ruled by marine reptiles. Program 4 "Giants of the Skies" is set in the early Cretaceous Period, 127 million years ago, and focuses on raptors, the bird-like dinosaurs whose descendents are modern-day birds. Program 5 "Spirits of the Ice Forest" continues through the early Cretaceous Period, 106 million years ago and focuses on dinosaurs that existed in the polar latitudes, including two Australian fossil sites. Program 6 "Death of a Dynasty" begins 65 million years ago in the Late Cretaceous Period, after dinosaurs have ruled the earth for 160 million years. Flowers, plants, and birds flourish, but volcanic activity poisons the air and many species become extinct. Suggests that the collision of a comet with the Earth brought a catastrophic end to the domination of dinosaurs, with birds their only surviving descendents. (AMAZON;c1999)

Paleontology

Evolution

WALKING WITH PREHISTORIC BEASTS

180 min; color; h,c,a
1/2" VHS **NC2403,VH**

Uses computer animation to recreate the look, movement, sound, and evolving environment of those animals, mostly mammals, who survived the calamity that killed the majority of dinosaurs 65 million years ago. Program 1 "New Dawn" starts 49 million years ago in the Eocene Period when the climate warmed and tropical forests stretched to the poles. Indicates that the density of the forests limited the size of the animals to that of modern-day pigs, with large, agile birds, the descendants of the dinosaurs, the top predators. Program 2 "Whale Killer" picks up in the late Eocene, 36 million years ago. As ice begins to form at the poles, rainforests give way to seasonal woodlands and dry plains, allowing mammals to become larger and live in herds on the plains. In the sea, whales become huge predators. Program 3 "Land of Giants" begins 28 million years ago in the Oligocene, when very large animals inhabited huge grassless scrub plains. Program 4 "Next of Kin" focuses on Africa's Great Rift Valley 3 million years ago, where australopithecus evolved on the edges of woodlands and on the savannah. Program 5 "Sabre Tooth" considers the role of sabre-toothed cats as the ruling predators one million years ago in South America. Indicates that they were successful at killing large prey because they lived and hunted in groups. Program 6 "Mammoth Journey" features the ice age that began 30,000 years ago with a change in Earth's orbit, which resulted in the extinction of the woolly mammoth and the success of two early human species, the Neanderthal and Cro Magnon, the latter being the ancestors of modern-day humans. (AMAZON;c2001)

Adaptation (Animals); Evolution; Mammals;
Paleontology

WHAT ABOUT GOD?

60 min; color; c,a
1/2" VHS **NC2380,VH**

Evolution Series - Outlines the debate between creationism and evolution. Interviews teachers and students at a school in Lafayette, IN, where some students are fighting to have creationism taught in biology classes. Profiles Ken Ham, who trains church members to argue against evolution, despite his own belief that creationism and evolution are not mutually exclusive. Points out that Darwin himself acknowledged, in his final edition of *The Origin of Species*, his belief in a Creator. Discusses William Jennings Bryan's involvement in the Scopes trial. Interviews biochemist and writer Walter Hearn. (WGBHTV;c2001)

Creation; Evolution

A WHOPPING SMALL DINOSAUR

27 min; color; i,j
1/2" VHS **NC1804,VH**

Follows a team of paleontologists in the Painted Desert as they unearth the remains of the oldest dinosaur yet discovered. Shows removal, shipment, and assembly of the bones in a museum. (CORT;r1986)

Paleontology

WHY SEX?

60 min; color; c,a
1/2" VHS **NC2378,VH**

Evolution Series - Explores the evolutionary reasons for sexual reproduction. Raises the question of the usefulness of sex by the example of a lizard species consisting only of females whose offspring are clones. Suggests that sexual reproduction provides genetic variation which increases the likelihood of successful competition in offspring. Compares reproductive strategies among peacocks, songbirds, and bonobos. Concludes with the opinion of evolutionary psychologists that human sexual behavior is rooted in four million years of evolutionary history. (WGBHTV;c2001)

Evolution; Reproduction (Animals)

THE WORLD: A TELEVISION HISTORY SERIES

Covers the history of the world from the dawn of humankind and the spread of agriculture, to the great classical civilizations, the development of Africa, the impact of the great religions, the Chinese empires, the Russian empire, the development of the United States, to the World Wars, the Cold War, and the division of the world into rich and poor nations.

THE WORLD: A TELEVISION HISTORY, NO. 1: HUMAN ORIGINS (10,000,000-8000 BC)

26 min; color; j,h,c,a
1/2" VHS **CC4042,VH**

Traces the progress of early hominids from their original habitat in equatorial Africa and considers how these ape-like creatures descended from the trees and began traveling upright on two feet. Discusses how man extended his hand and brain by means of weapons and tools. Shows how man adapted to the environmental changes, learning to make clothing from animal skins and using fire. Discusses man's spread to Europe, Asia, America and Australia. (LAEM;c1985)

Evolution; History, Ancient (4000 B.C.-A.D. 476)