## The History of Creationism

## BY LENNY FLANK - MARCH 2006

A short history of creation "science":

The Scopes Monkey Trial in 1925 marked the downfall of the fundamentalist movement in the United States and the end of its efforts to pass laws forcing its religious opinions into science classrooms. However, the Scopes trial also had a negative effect on science education in the US, particularly as it related to evolution. Although the teaching of evolutionary theory was not illegal in every state, and the existing "monkey laws" were not enforced where they remained, the affects of these laws permeated biology education throughout the country. The textbook that Scopes had used in Tennessee, Civic Biology by George W. Hunter, had been adopted by the State Textbook Commission in 1919, and treated the subject of evolution in a fair amount of detail. In the wake of the Scopes trial, however, a new version, entitled New Civic Biology, appeared. In this version, evolution was not mentioned at all.

Other publishers bowed to economic realities and followed suit. As researchers Raymond Eve and Francis Harrold note, "Publishers are in business to make money. Books containing too much evolution might be rejected where the topic was illegal or unpopular. It was easier on the balance sheet to issue a simple nationwide edition of a book that contained material offensive to no one." (Eve and Harrold,

1991, p. 27) The effect on science education was profound. Almost overnight, evolution as a topic was banned from nearly every science textbook in the country. As Dorothy Nelkin points out, "Textbooks published throughout the late 1920's ignored evolutionary biology, and new editions of older volumes deleted the word 'evolution' and the name 'Darwin' from their indexes. Some even added religious material." (Nelkin, 1982, p. 33) Judith Grabiner and Peter Miller note, "It is easy to identify a text published in the decade following 1925. Merely look up the word 'evolution' in the index or glossary; you almost certainly will not find it." (Grabiner and Miller, "Effects of the Scopes Trial", Science, Sept 6, 1974, p. 833) While Darrow and the evolutionists had won the Scopes battle by discrediting the fundamentalists, they had lost the war. The creationist "monkey laws" had a chilling effect on biological education in the United States for several decades.

The results became apparent in 1957, when the Soviet Union launched the Sputnik satellite, shocking the United States out of its intellectual complacency and dramatically illustrating the inadequacy of science education in the US. In response to the new "space race", Congress passed a number of laws like the National Defense Foreign Languages Act and the National Defense Education Act, instituting a crash program to bring American science education up to par. One of these new programs was the Biological Sciences Curriculum Study, begun in 1959, to produce new up-to-date biology textbooks. Written by professional scientists in their fields, the BSCS texts prominently featured evolutionary theory as the foundation of all the biological sciences. Within a few years, nearly half the high schools in the country were using BSCS biology textbooks, despite the fact that antievolution laws were still on the books in a number of states.

Creationists were quick to respond. The Institute for Creation Research, in California, was formed by a group of anti-evolutionists including Henry Morris and Duane Gish, with money from several fundamentalist church groups. It quickly became the largest anti-evolution organization in the US. Smaller creationist groups included the Creation Research Society and the Creation Science Research Center.

In 1961, the Tennessee state legislature attempted to repeal the Butler Act (the law which had prompted the Scopes trial), but failed after an acrimonious debate, during which one legislator equated evolutionists with communists: "Any persons or any groups who assist in any way to undermine faith in the teachings of the Bible are working in harmony with communism." (W. Dykeman and J. Stokely, "Scopes and Evolution--The Jury is Still Out", New York Times Magazine, March 12, 1971, p. 72) In 1967, teacher Gary Scott of Jacksboro, Tennessee was fired for violating the Butler Act. He fought his firing in court and won, and the Butler Act was finally ruled unconstitutional by the Federal courts.

Shortly afterwards, Arkansas biology teacher Susanne Epperson filed a court challenge to the Arkansas monkey law. When the Arkansas Supreme Court upheld the law, Epperson appealed to the US Supreme Court, which ruled in 1968 that all state monkey laws were unconstitutional, on the grounds that they served to establish a state-supported religion and eroded the separation of church and state. The anti-evolution laws, the Court decided, were nothing more than "an attempt to blot out a particular theory because of its supposed conflict with the Biblical account, taken literally." (US Supreme Court, Epperson v Arkansas, 1968)

In 1973, just six years after repealing the Scopes anti-evolution law, the Tennessee State Legislature passed a replacement for the Butler Act. The new law stated, "Any biology textbook used for teaching in the public schools, which expresses an opinion of, or relates a theory

about origins or creation of man and his world shall [give] . . . an equal amount of emphasis on . . . the Genesis account in the Bible." (Public Acts of Tennessee, 1973, Chapter 377, cited in LaFollette, 1983, p. 80) Within two years, this law had also been struck down by the Federal Courts, which ruled that the Tennessee law was "a clearly defined preferential position for the Biblical version of creation as opposed to any account of the development of man based on scientific research and reasoning. For a state to seek to enforce such preference by law is to seek to accomplish the very establishment of religion which the First Amendment to the Constitution of the United States squarely forbids." (US District Court, Daniel v Waters, 1975)

The creation "science" movement was a response to these Court decisions. Creationists from the Institute for Creation Research and Creation Research Society wanted, in effect, to turn the clock back to 1925, when evolution was illegal and the Biblical story of origins was mandated by law. As Henry Morris puts it, "A key purpose of the ICR is to bring the field of education--and then our whole world insofar as possible--back to the foundational truth of special creation and primeval history as revealed first in Genesis and further emphasized throughout the Bible." (Morris, Back to Genesis, July 1995) CRS co-founder Walter Lammerts echoes, "Our aim is a rather audacious one, namely, the complete re-evaluation of science from the theistic viewpoint." (Lammerts, 1975, p. 2)

The creationists cited several reasons why they believe creationism should be taught in the public schools, and one of these, they flatly admitted, was that it encouraged belief in a personal Deity and thus encouraged a "Christian lifestyle": "There is no greater stimulus to responsible behavior and earnest effort, as well as honesty and consideration for others, than the awareness that there may well be a personal Creator to whom one must give account." (Morris, Scientific Creationism, 1974, p. 14)

However, since the Supreme Court had now prohibited as unconstitutional the teaching of religious doctrines in the public schools, creationists were no longer able to make these religiouslybased arguments in court, and instead had to resort to a new strategy -- arguing, in an inversion that would have made Orwell proud, that (1) creationism is science, not religion, and (2) evolution is religion, not science. As Morris summarizes, "Since creationism can be discussed effectively as a scientific model, and since evolution is fundamentally a religious philosophy rather than a science, it is clearly unsound educational practice and even unconstitutional for evolution to be taught and promoted in the public schools to the exclusion or detriment of special creation. . . . Creationist children and parents are thereby denied 'equal protection of its laws' and the state has, to all intents and purposes, made a law establishing the religion of evolutionary humanism in its schools." (Morris, 1975, p. 14) Therefore, in response to the Supreme Court decisions, the creationist movement made the strategic decision to downplay the religious aspects of creationism, and to argue that creationism could be supported solely through scientific evidence, without any reference to God or the Bible. Thus was born "creation science" -- it was nothing more than an attempt by the fundamentalists to dishonestly sneak their religious views into the classroom by pretending that they are really a "science". It was, in fact, a deception by design.

There have been a large variety of people who have claimed the mantle "creation scientists". As in any political and religious movement, there are several schools of creationist thought, separated by doctrinal differences in their interpretations of the Bible. (According to one source, there were in 1984 no less than 22 national creationist organizations in the United States, and at least 54 state and local organizations.)

The "day-age" faction of creationism argues that the "days" referred to in Genesis are really symbolic of enormous stretches of time, and not 24-hour days. Perhaps the best-known of the "day- age" groups today are the Jehovah's Witnesses. Another school of thought is that of the "gap" theorists, who argue that there is an unmentioned lapse of time between the first and second verses of Genesis, and that the six-day creation event did not happen until after a long period of time had already passed. Several of the televangelists were "gap" theorists. Finally, there are the "strict" creationists, who assert that creation happened as described in Genesis, and that the universe and all life was created within six days, several thousand years ago. The first two schools, the "day- age" and the "gap", accept the geological evidence of a very ancient earth (but not the evidence of evolution), and are usually referred to collectively as the "old earth creationists" or OECs. The strict creationists, however, assert that the earth is, based on the geneologies in Genesis, just 6,000 to 10,000 years old, and they are referred to as "young-earth creationists" or YECs.

There is also another trend of thought, the "theistic evolutionists", who argue that evolution is simply the method which God used to create life, and that there is no conflict between science and the Bible. Nearly all mainstream religious denominations (as well as most scientists) are supporters of theistic evolution. Although they could be considered "creationist", since they do assert that the universe was made by God, theistic evolutionists are viewed by the fundamentalists as "the liberal enemy" who is doing the work of Satan. It would be more proper to view the fundamentalist creationists as "anti-evolutionists", since the one thing that unites them all is the belief that evolutionary theory is contrary to the tenets of Christianity. Since, on this matter, the theistic evolutionists are on the "wrong" side, they are not accepted as "creationists" by the fundamentalists.

It was the young-earth creationists who dominated the creation "science" movement and who headed all of the major creationist organizations, and it was the viewpoints of the young-earthers which found their way into the various anti-evolution or "balanced treatment" laws which they sought to pass. The pivotal Arkansas Balanced Treatment Act, for instance, defined "creation science" in terms of young-earth creationism:

"'Creation-science' includes the scientific evidences and related inferences that indicate: (1) Sudden creation of the universe, energy and life from nothing, (2) The insufficiency of mutation and natural selection in bringing about development of all living kinds from a single organism, (3) Changes only within fixed limits of originally created kinds of plants and animals, (4) Separate ancestry for men and apes, (5) Explanation of the earth's geology by catastrophism, including the occurrence of a world- wide flood, and (6) A relatively recent inception of the earth and living kinds." (Arkansas Legislature Act 590, 1981)

Young-earth creationism (which later became "scientific creationism") can essentially be traced back to one man, George McCready Price, a fundamentalist Seventh Day Adventist who accepted the literal truth of the Bible as a matter of course. In 1923, Price published a book called The New Geology, in which he argued that all of the geological features we see today were the result of Noah's Flood, and not the slow geological processes described by scientists. The geological column, Price asserted, was nothing more than the deep sediments deposited by the Flood, while all of the various fossils were merely the dead bodies of organisms that had drowned in the Deluge. Conventional geology, Price asserted, was a fraud, fostered upon an unsuspecting public by scientists who were doing the work of the Devil: "Some of the tricky methods used by the Great Deceiver to

befuddle the people of the last days". (cited in Numbers, 1992, p. 137) Price's ideas became known as "Flood geology".

While geologists dismissed Price as a crank and ridiculed The New Geology as being riddled with error and distortion, the book caused a sensation among religious fundamentalists, who cited it as the first book to use science to show that the Bible is literally correct. Price (who was not a geologist) was even cited during the Scopes trial as a scientific expert. For a time, he traveled to England, where a disciple of his, Douglas Dewar, enthusiastically echoed his mentor, saying bluntly, "The Bible cannot contain false statements, and so if its statements undoubtedly conflict with the views of geologists, these latter are wrong." (cited in Numbers, 1992, p. 146) Much of Price's "flood geology" can be found, nearly intact, in the writings of modern young-earth creationists.

In 1935, Price helped to form the Religion and Science Association, the first nationwide creationist organization. The RSA had as its acknowledged purpose that of using scientific data to support the Bible. Shortly after it was formed, however, the RSA was torn by an internal feud between those who accepted Price's Flood geology and those who rejected it. One of RSA's founding members, the Lutheran theologian Theodore Graebner (an old-earth creationist who taught biology in several fundamentalist universities) flatly declared that Flood geology had no supporting evidence: "In spite of all that I have read about the Flood theory to account for stratification, erosion and fossils, I cannot view the mountains without losing all faith in that solution of the problem." (cited in Numbers, 1992, p. 112) By 1937, the Religion and Science Association had collapsed under the weight of this feuding.

Shortly after the death of the RSA, the Price supporters formed their own organization, the Deluge Geology Society, with the specific

purpose of supporting the theories of Flood geology. Price was a cofounder and the most illumined member. Another co-founder was fellow Seventh Day Adventist Harold W. Clarke, who had also been a founding member of the RSA while teaching biology at an Adventist college in California. Another person who joined the DGS was a grad student from the University of Minnesota named Henry Morris, whose name will crop up very often in later creationist history.

To prevent the kind of internecine fighting that destroyed the RSA, the Deluge Geology Society only admitted committed Flood geologists as members. Despite this precaution, however, internal feuding broke out anyway, over the question of the age of the solar system. The old-earthers argued that the scientific evidence which indicated a very old solar system did not conflict with Genesis, a position which the young-earthers found heretical. The organization collapsed in 1948.

During this time, a new creationist organization appeared, one which became much more influential than the oft-ignored DGS. This was the American Scientific Affiliation, which was formed in 1941 to explain how science supported the Bible. Unlike the RSA and DGS, which were more concerned with theology than science, the ASA required all of its members to have legitimate scientific credentials. It also required all members to sign an oath of membership, swearing:

"I believe the whole Bible, as originally given, to be the inspired Word of God, the only unerring guide of faith and conduct. Since God is the Author of this Book, as well as the Creator and Sustainer of the physical world about us, I cannot conceive of discrepancies between statements in the Bible and the real facts of science." (cited in Numbers, 1992, p. 159)

This tactic of limiting membership to scientists who already agreed to the literal truth of Genesis would later be repeated. In effect, by using scientific knowledge as an apologetic for Biblical truth, the ASA became the first "creation science" organization.

Although the ASA had no connections to the Deluge Geology Society when it was formed, it was quickly approached by the DGS, which wanted to publish a joint anti-evolution periodical. The ASA leadership, distrustful of the "strong Seventh-Day Adventist flavor" of the Deluge Society (cited in Numbers, 1992, p. 161), turned them down.

In the end, however, it was the ASA's insistence on a semblance of scientific respectability which proved to be its undoing. Once again, Flood geology was at the center of the dispute. Dr. J. Laurence Kulp, a chemist and geologist, flatly rejected Flood geology and pointed out that it was demonstrably untrue, and to insist upon it as Biblicallyinspired would make a laughingstock out of creationism. "This unscientific theory of Flood geology," Kulp wrote, "has done and will do considerable harm to the strong propagation of the Gospel among educated people." (cited in Numbers, 1992, p. 167) Kulp was soon joined by biologist J. Frank Cassell, who presented a paper to the ASA in 1951 bluntly stating, "Evolution has been defined as 'the gradual or sudden change in animals and plants through successive generations' . . . Such changes are demonstrable. Therefore, evolution is a fact." (cited in Numbers, 1992, p. 174-175) Cassell argued that ASA's entire attitude on evolution had to change if it was to maintain any scientific respectability, and urged ASA to adopt an attitude of theistic evolution. (This effort was partially successful. ASA took no official position on the question of creation "science", and most of its members are theistic evolutionists--although the group did publish a

booklet entitled Teaching Science in a Climate of Controversy, which defended old-earth creationism.)

The young earthers defended their "science" against the attacks of Kulp and Cassell. During the 1953 ASA annual convention, Henry Morris presented a paper entitled "The Biblical Evidence for a Recent Creation and Universal Deluge". Morris, a staunch Biblical literalist and young-earth creationist, had deliberately chosen to major in hydraulic engineering and minor in geology, so he could study the effects that flood waters would have on the earth. In 1946, the year he entered grad school at the University of Minnesota, he published a pamphlet called "That You Might Believe", which defended Flood geology. Morris joined the Deluge Geology Society while still a grad student.

At the 1953 ASA convention, Morris first met John C. Whitcomb, Jr., a theologian with an interest in Flood geology and young-earth creationism. In 1957, Whitcomb finished a ThD dissertation entitled "The Genesis Flood", which presented a detailed defense of the historicity and geological affects of Noah's Flood. Shortly afterwards, he decided to publish the thesis as a book, but thought it would have more impact if a geologist wrote the sections dealing with Flood geology. Whitcomb approached several creationist geologists for help in the book, but was turned down by all of them, who rejected Flood geology for various reasons. Finally, he approached hydraulic engineer Henry Morris, who, after some initial hesitation, agreed to co-author the book. The Genesis Flood was financed by a number of religious fundamentalists (including Rouas J. Rushdooney, who would go on to begin the Christian "Reconstructionist" movement). The book was published in February 1961.

For geologists, The Genesis Flood was a yawn, merely an updated rehash of McCready Price's New Geology. The book also received

criticism from the old-earth creationists, who argued that the very idea of a global Flood was not supported by any of the geological evidence. In response, Whitcomb and Morris answered simply that Genesis said there had been a global Flood, therefore there must have been one: "The real issue is not the correctness of the interpretation of various details of the geological data, but simply what God has revealed in His Word concerning these matters." (Whitcomb and Morris, 1961, p. xxvii) To the ASA Journal, which was vocal in its criticism of the book, Morris wrote, "The real crux of the matter is 'What saith Scripture?' " (cited in Numbers, 1992, p. 208)

The Southern Baptist Church where Morris taught apparently disagreed, and Morris left over theological differences concerning the Flood. Shortly afterwards, Morris formed his own College Baptist Church, and one of his guest pastors was Jerry Falwell, a then-obscure minister in nearby Lynchburg, Virginia. Since then, Falwell and Morris became (and have remained) silent partners-- Falwell's Moral Majority Inc. gave financial support to Morris's creationist institutions, and Falwell has plugged Morris's creationist books to his large television audience.

The dispute within the American Scientific Affiliation over Flood geology soon convinced the young-earthers that the ASA was getting "soft on evolution". In late 1961, the plant breeder Walter Lammerts, who had long been affiliated with creationist organizations, joined with Henry Morris and Duane Gish to form an "anti-evolution caucus" within the ASA. Lammerts was an extremist even for a creationist -- unlike most young-earthers, who accepted a limited form of evolution within "created kinds", Lammerts rejected even this and asserted that no speciation of any sort was possible. Gish, a Regular Baptist and a fundamentalist, had joined the ASA in the late 1950's, after getting his PhD in bio- chemistry from Berkeley. He worked as a protein researcher for the Upjohn Company. Together,

the three formed a breakaway creationist organization called the Creation Research Committee in 1963. The Committee later changed its name to the Creation Research Society, the name it still bears today.

The CRS was the first national group to be headed by Henry Morris, the "Father of Creation Science", and it quickly came to reflect the views of its leader. The purpose of the CRS, it declared, is "to publish research evidence supporting the thesis that the material universe, including plants, animals and man are the result of direct creative acts by a personal God." (Creation Research Society, Articles of Incorporation, Lansing, Michigan, cited in Nelkin, 1982, p. 78) Morris had by this time decided that scientific data could be used as an effective tool for bringing people to Christ, and he began to point to his Flood geology model as an "alternative science", one that proved the literal correctness of the Bible. He also began to explore the possibility of using the state legislatures to have "Balanced Treatment" acts passed, mandating equal treatment of "evolution science" and "creation science" in biology classrooms.

To help legitimize this viewpoint, CRS maintained the old ASA tactic of admitting only credentialled scientists as members. And, in an effort to avoid the faction- fighting and ideological bickering that had marked the earlier creationist organizations, CRS also adopted a long, detailed oath which all members had to swear, which bound them firmly to a literal interpretation of Genesis, a young-earth outlook, and acceptance of the Flood geology model:

"(1) The Bible is the Written Word of God, and because it is inspired thruout, all its assertions are historically and scientifically true in all the original autographs. To the student of nature, this means that the account of origins in Genesis is a factual presentation of simple historical truths.

- (2) All basic types of living things, including man, were made by direct creative acts of God during the Creation Week described in Genesis. Whatever biological changes have occurred since Creation Week have accomplished only changes within the original created kinds.
- (3) The great Flood described in Genesis, commonly referred to as the Noachian Flood, was an historic event worldwide in its extent and effect.
- (4) We are an organization of Christian men of science who accept Jesus Christ as our Lord and Savior. The account of the special creation of Adam and Eve as one man and woman and their subsequent fall into sin is the basis for our belief in the necessity of a Savior for all mankind. Therefore, salvation can come only through accepting Jesus Christ as our Savior." (By- Laws of the Creation Research Society, cited in Numbers, 1992, p. 230-231)

It may seem strange for an institution which tried to present itself as "scientific" to require all of its members to swear an oath affirming their belief in certain specific conclusions, regardless of the scientific evidence, but clearly the purpose of the Creation Research Society had less to do with scientific investigation than it had in proselytizing people to fundamentalist Biblical literalism. In fact, a large number of creationists objected to the use of science at all, arguing that the religious message was weakened and cheapened by attempting to use scientific data to "prove" the act of creation. One of the most vociferous objectors was Morris's former co-author John C.

Whitcomb, who complained that "One might just as well be a Jewish or even a Muslim creation scientist as far as this model is concerned . . . By avoiding any mention of the Bible, or Christ as the Creator, we

may be able to gain an equal time in some schools. But the cost would seem to be exceedingly high, for absolute certainty is lost and the spiritual impact that only the living and powerful Word of God can give is blunted." (Whitcomb, Grace Theological Journal, 1983, cited in Numbers, 1992, p. 246)

In 1978, Walter Lang, the editor of the creationist Bible Science Newsletter, echoed the sentiments of many creationists who felt that scientific justification for creation was unnecessary and detracted from the spiritual message: "Only about five percent of evolutionists-turned-creationists did so on the basis of the overwhelming evidence for creation in the world of nature." (Lang, Bible Science Newsletter, June 1978, cited in Numbers, 1992, p. 233) Indeed, Lammerts, Gish and Morris had all been committed creationists before they had gained any scientific experience.

Morris, however, was completely committed to his strategy of using "creation science" to get around the Supreme Court's Epperson decision and win a place for Genesis in American science classrooms, and took steps to present creationism as a scientific, not a religious, outlook. "Thus," Morris explained, "creationism is on the way back, this time not primarily as a religious belief, but as an alternative scientific explanation of the world in which we live." (Morris, Troubled Waters of Evolution, 1974, p. 16) Morris's book Scientific Creationism was intended to be the definitive book on the science of creationism, suitable for use in public school biology courses.

In 1970, Morris and Christian fundamentalist preacher Tim LaHaye (of the Moral Majority Inc), working with the Scott Memorial Baptist Church, raised money and set up the Christian Heritage College in San Diego, an unaccredited Bible college. In its 1981 academic catalogue, the College offered several courses in science, all taught, it says, in a "consistently creationist and Biblical framework". As for

evolutionary theory, the catalogue stated, "Biblical criteria require its rejection as possible truth." (1981-1982 General Catalogue, Christian Heritage College, p. 10, cited in LaFollette, 1983, p. 107) Morris himself was teaching a course in "creation science" at the College.

Working with fellow creationists Kelly and Nell Segraves, who had helped establish a local chapter of the Bible Science Association -- a hardline creationist organization -- Morris helped establish the Creation Science Research Center, for the specific purpose of producing "creation science" materials which could be used in public classrooms once the creationists succeeded in having creation "science" put into the schools. Morris also founded the Institute for Creation Research as a scientific laboratory for the Christian Heritage College, with the avowed purpose of attempting to scientifically "prove" the literal validity of Genesis.

Shortly afterwards, however, a power struggle broke out in the CSRC between Morris and the Segraves. The Segraves wrested control of the Center, and promptly disaffiliated it from the Christian Heritage College and from the ICR. ICR remained affiliated with the Christian Heritage College until the early 1980's, when it became expedient for the creationists to downplay ICR's religious connections and attempt to paint its Bible science research as a purely secular, scientific institution. ICR attempted to maintain the fiction that it was a scientific institute with no religious affiliations, but most ICR staffers, including Henry Morris and Duane Gish, were still adjunct professors at the Christian Heritage College. The ICR carried out no field research in any of the life sciences, and, despite its claim to be purely scientific, it maintained its tax-exempt status with the IRS on the grounds that it is a religious institution carrying out "non-scientific research".

A number of smaller creationist organizations also existed. The old Geoscience Research Institute was still active. It was based at Loma Linda University, a Seventh-Day Adventist college. For the most part, GRI avoided legislative or political work, and focused instead on providing creationist reference materials to biology and geology teachers. GRI adheres to old-earth creationism.

Another small organization which got some press occasionally was the Creation Evidences Museum near Glen Rose, Texas. The Museum is still run today by the Rev Carl Baugh, who has a PhD in anthropology from the College of Advanced Education, an unaccredited Bible college on the grounds of the Sherwood Park Baptist Church. (Baugh also claims several other doctoral degrees -all of them come from diploma mills owned by either himself or his business partner). The primary attractions of the Museum are the socalled "man tracks" from nearby Dinosaur Valley State Park, along the Paluxy River. According to the creationists, the state park contains dinosaur tracks alongside those of modern humans, proving that the two lived together. Baugh has also claimed to have found a fossil human tooth buried among the dinosaur bones. Ever since his major claims (including the footprints and the "human tooth") have been debunked, Baugh is viewed as somewhat of an oddball by the major creationist groups.

Perhaps some mention should be made of the fringe creationist groups which even the ICR and CSRC acknowledged were a bit loony. The best known of these has to be the Flat Earth Society, which argues on both scientific and religious grounds that the earth is really flat, and that geological and astronomic data, if properly interpreted, prove this to be true. (The Flat Earthers were featured a few years ago in a television special aired by the Discovery Channel cable network.) Another fringe group is the Tychonian Society, which, unlike the Flat Earth Society, accepts that the earth is round, but which argues, on

scientific and religious grounds, that the earth is at the center of the universe and the sun revolves around it.

ICR, however, was (and still is) the shining star of the young-earth creationist movement, and is responsible for most of the creationist literature that is available. The ICR makes a lot of self-congratulatory noise about its "scientific credentials". Members of the ICR, it proudly declares, are required to have an advanced degree in at least one of the sciences. They usually fail to mention, however, that, like the CRS, all of its members must sign an oath affirming their belief in a literal interpretation of Genesis and their acceptance of Jesus Christ as their Lord and Savior. Muslims, Jews, Buddhists, and any other non-fundamentalist creationists are not allowed membership in the ICR unless they renounce those beliefs and sign the ICR's oath of Biblical infallibility.

Not all of the young-earth creationists are scientists. One of the creationist witnesses at the Arkansas trial was Dr. Norman Geisler, a fundamentalist theologian at the Dallas Theological Seminary. During his pre-trial deposition, Geisler was asked if he believed in a real Devil. Yes, he replied, he did, and cited some Biblical verses as confirmation. The conversation then went:

"Q. Are there, sir, any other evidences for that belief besides certain passages of Scripture?

GEISLER: Oh, yes. I have known personally at least 12 persons who were clearly possessed by the Devil. And then there are the UFOs.

Q. The UFOs? Why are they relevant to the existence of the Devil?

GEISLER: Well, you see, they represent the Devil's major, in fact, final attack on the earth.

Q. Oh. And sir, may I ask how you know, as you seem to know, that there are UFOs?

GEISLER: I read it in the Readers Digest." (Trial Transcript, US District Court, McLean v Arizona, 1981, cited in Gilkey, 1985, p. 76)

At trial, Geisler testified under oath (apparently with a straight face) that flying saucers were "Satanic manifestations for the purposes of deception". (Trial transcript, US District Court, McLean v Arkansas, 1981, cited in Gilkey, 1985, p. 77, LaFollette, 1983, p. 114 and Nelkin, 1982, p. 142)

Geisler also testified that the Arkansas creationism bill did not introduce religion into the schools for the simple reason that God is not a religious concept. "It is possible," Geisler intoned, "to believe that God exists without necessarily believing in God." In support of this idea, Geisler argued that the Devil acknowledged the existence of God but did not worship Him, and therefore treated God as a non-religious concept. (Trial transcript, McLean v Arkansas, 1981, cited in Berra, 1990, p. 134) Judge Overton rather politely concluded that Geisler's notion "is contrary to common understanding". (Overton Opinion, McLean v Arkansas, 1981)

Recently, ICR's dominance of the young-earth creationist movement has been challenged by two others. The first (and probably the looniest) is "Dr" Kent Hovind, a Florida preacher who is perhaps best-known for his "challenge" offering \$250,000 to anyone who can prove (to him, anyway) that evolution happens. "Dr" Hovind (the

"doctoral degree" comes from an unaccredited diploma mill) seems to be an unabashed "militia" type. He has faced several years of legal problems for his refusal to pay taxes (Hovind claims that he doesn't actually own anything or make any income -- it all belongs to God instead), and has spouted all sorts of looney "government conspiracy" theories, including "the government is watching us through our TV sets", "the US government carried out the Oklahoma City bombing so they could blame the militias", and "AIDS and the West Nile virus are the products of American biological warfare labs". Hovind also thinks that flying saucers come from the Devil. Most other creationist organizations view Hovind as an embarrassment.

The biggest young-earth challenger to ICR, though, is Answers in Genesis, led by Carl Weiland and former ICR staffer Ken Ham. Unlike the creation "scientists", AIG is openly adamant about the religious basis of its opposition to evolution, and makes no attempt to hide the fact that it is a "Christian apologetics organization". In general, AIG's theology and "science" are much the same as ICR's. AIG's significance, however, comes from the fact that it is much more active in supporting international efforts to expand creationism than is ICR (AIG funds anti-evolution movements in Russia, South America and elsewhere). AIG has also distinguished itself by publishing a long list of "arguments creationists should not use", concluding that "Persisting in using discredited arguments simply rebounds -- it is the truth that sets us free." (AIG website). Many of the arguments that AIG cites as "discredited" are some of the old staples still being used by other young-earthers, such as "Darwin recanted on his deathbed", "moon dust proves the earth is young", "Archaeopteryx is a hoax", "the Paluxy tracks prove men lived with dinosaurs", "c-decay proves a young earth", and "anything from Carl Baugh". In response, AIG has drawn criticism from other youngearthers (including Hovind) for "fragmenting" the Christian movement. Historically, fundamentalists have never been very good

at tolerating any criticism or dissent, particularly from within their own ranks.

The young-earth creationists, while dominating most of the creation "science" movement, are opposed by the "old-earth" groups. The oldearthers accept that the earth is billions of years old and that the young-earth "flood geology" is largely wrong, but agree with the young-earthers that evolution is wrong, false and anti-Christian. The largest and best-known of the old-earth creationist groups is Reasons to Believe, founded by astronomer Hugh Ross. The very name of the group makes its aim apparent. Ross's credibility is perhaps best illustrated by his recent book (co-authored with two other fundamentalists) entitled Lights In the Sky and Little Green Men: A Rational Christian Look at UFO's and Extraterrestrials (NavPress, Colorado Springs CO, 2002). Over several chapters, Ross dismisses, on scientific and Biblical grounds, the existence of any life other than terrestrial. But, he declares, there are so many reliable UFO reports that they can't all be mistakes or hoaxes (he calls the remaining reliable reports "Residual UFO's"). His "rational Christian" conclusion is something he calls the "trans-dimensional hypothesis" -- flying saucers are actually entities that come from "beyond our space and time dimensions" and which, although real entities, are not physical beings. OK, so what are the flying saucers, then? According to Ross: "It can now be determined who is behind the RUFO experiences. Only one kind of being favors the dead of night and lonely roads. Only one is real but nonphysical, animate, powerful, deceptive, ubiquitous throughout human history, culture, and geography, and bent on wreaking psychological and physical harm. Only one entity selectively approaches those humans involved in cultic, occultic or New Age activities. It seems apparent that residual UFO's, in one or more ways, must be associated with the activities of demons." (pages 122-123).

Furthermore, Ross declares, "The conclusion that demons are behind the residual UFO phenomenon is a testible one." (p. 124) Ross points out that "according to the Bible" demons only can attack people who dip into the occult and make themselves vulnerable. Ross declares, "All that is necessary to further prove the conclusions of demonic involvement, therefore, is to continue surveying people to ascertain who has encounters with residual UFO's and who does not. If the demonic idenficiation of the RUFO phenomenon is correct, researchers should continue to observe a correlation between the degree of invitations in a person's life to demonic attacks (for example, participation in seances, Uija games, astrology, spiritualism, witchcraft, palm reading, and psychicreading) and the proximity of their residual UFO encounters." (Ross of course neglects to mention another possible reason for these "correlations" --- people who believe one goofy thing are more prone to believe other goofy things as well.) And why is that scientists and other researchers decline to study Ross's demonology? Well, because they're all atheists: "One reason why research scientists and others may be reluctant to say that demons exist behind residual UFO's is because such an answer points too directly to a Christian interpretation of the problem." (page 125)

Ross is not the only creationist who seems to be obsessed with flying saucers. As we have already seen, Dr Norman Geisler testified at the Arkansas trial that flying sacuers come from the Devil, an opinion echoed by "Dr" Kent Hovind. In my years of online discussions with creationists, I have had three different creationists, at different times, tell me in all apparent seriousness that flying saucers are actually time machines that are used by atheistic scientists to travel back into the past and plant fake fossils as evidence for evolution.

Another active old-earth creationist organization is the Foundation for Thought and Ethics. The FTE produced a proposed creationist biology textbook, Of Pandas and People, which had not been

approved by any state education boards but occasionally turned up in local school districts. Although FTE claims it is a scientific group, on the tax exemption forms it files with the IRS, it states that the organization's purpose is "proclaiming, publishing and preaching . . . the Christian gospel and understanding of the Bible" (cited in Eve and Harrold, 1991, p.131) Pandas lists two authors, Percival Davis and Dean Kenyon. Davis later co-wrote a book titled Case for Creation with young-earth creationist Wayne Frair (Frair testified for the creationists during the Arkansas trial), in which he wrote: "We accept by faith the revealed fact that God created living things. We believe God simultaneously created those crucial substances (nucleic acids, proteins, and so on) that are so intricately interdependent in all of life's processes, and that He created them already functioning in living cells." (cited in NCSE's review of Pandas and People,) In 1994, Davis was asked by the Wall Street Journal if he had religious motives in writing Pandas. "Of course my motives were religious," Davis replied. "There's no question about it." (Wall Street Journal, cited in Pittsburgh Post-Gazette, Jan 9, 2005) As for Dean Kenyon, he was one of the creation "scientists" who testified during hearings on the Louisiana "balanced treatment" bill that creationism was science and had no religious basis whatsoever. Kenyon is now a Fellow at the Discovery Institute, the leading proponent of Intelligent Design "theory". His Pandas book, ironically, would serve as the instrument of death for ID "theory".

## Lenny Flank

"There are no loose threads in the web of life"