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## DOES NATURE KNOW BEST?

**In 1971 the Sierra Club published a book by Barry Commoner (*The Closing Circle*) proclaiming that “the third law of ecology” is, “Nature knows best.”**

There is nothing wrong in saying, *Nature knows best* in the right context. Doctors sometimes say it to reassure a patient. Horticulturists like me often say it when working with plants. We’ve all heard advertisers say it to flog everything from butter to the latest natural face cream. My charming neighbour says it when he regales me about the benefits of Echinacea and olive leaf extract for all kinds of ailments.

But there is everything wrong in saying, as the Sierra Club does, that it a law that nature know best, meaning that nature knows best under all circumstances. That is a dangerous, unscientific fanaticism. I hope my neighbour opts for something better than Echinacea and olive leaf extract if one of his kids gets meningococcal. As my mentor in philosophy used to say, “Extreme views have this advantage: they are remarkably consistent.” And I would add, “And seductively simple.”

Environmentalism began as a back-to-nature movement to protest the widespread abuse and pollution of the environment throughout the developed world. It blamed Western culture for becoming alienated from nature. The movement has made an enormous contribution by raising the importance of caring for the environment in the public consciousness. It has elevated the environment as an issue at the forefront of the political debate. But as often happens with enthusiastic movements, the original vision hardened into an inflexible dogma that gives Mother Nature the status of an all-wise goddess. Some even call her Gaia, a name pagans once gave to the goddess of nature. According to this ideology, nature always knows best, and she is best left alone to do her work without any human interference. This kind of inflexible dogma clearly indicated that the environmental movement had morphed into eco-fundamentalism.

I define fundamentalism as any ideology or belief system that becomes more important than human well-being. A JW father let his son die for want of a blood transfusion because his belief system was more important to him than his son’s life. That’s fundamentalism. Greenpeace would rather let one million people a year die due of a Vitamin A deficiency, than modify its ideological opposition to a new strain of biotech rice that’s been enriched with beta carotene. That’s fundamentalism.

I am not suggesting that every environmentalist is a fundamentalist. There are lots of environmentalists who want rational, evidence-based science rather than the dogma of a belief system, especially one that is so hopelessly biased against human technology. Hereunder are some examples:

**Dubos:** Rene Dubos was one of the fathers of the environmental movement. He made his mark as an advocate of wetland conservation. He coined the popular environmental slogan, “Think globally; act locally.” But Dobos’s research into the way eco-systems

behave led him to conclude that nature was often wasteful and plagued by shortcomings. To the horror of the eco-theologians, Dubos declared, "Nature does not know best." He rubbed salt into the wound when he also suggested that the veneration of nature was a foolish distraction.

**Ames:** Toxicologist Bruce Ames became a hero within the environmental movement when he proved that a man-made fire retardant was carcinogenic. That's the kind of stuff that the crusaders biased against man-made things love to hear. Further evidence-based research, however, convinced Ames that naturally occurring food chain substances exposed us to far more carcinogens and toxins than man-made chemicals. That kind of evidence-based information was treated like heresy and Ames was treated like a leper. The eco-fundamentalists were like the pigs in George Orwell's *Animal Farm* who just wanted the faithful to keep chanting, "Four legs good, two legs bad."

**The New Ecologists:** When Barry Commoner declared that nature knows best, he said this in the context of arguing that eco-systems should be returned to their primitive state of "balance," that was supposed to exist before humans disturbed them. The only way to achieve this, he said, was to "let nature take its course" and to keep humans out. Left alone, ecosystems remain stable. When people meddle, systems collapse. Preservation therefore requires isolating eco-systems from people. So goes the theory. I'm sure you have not only heard this, but seen it in action through the work of environmental bureaucrats who operate from government departments such as NPWS, now called DEC in NSW.

This has all been based on the theory that eco-systems prefer "the steady state" to one that is disturbed, especially by humans. But in more recent years, a new consensus has emerged among ecologists who now say that natural areas have for millennia been shaped by constant and often cataclysmic disturbances in the form of climate change, earthquakes, volcanoes, floods, fire and many human activities. "The evidence is clear: random disturbance, not permanence and order govern nature," writes Alston Chase (*In a Dark Wood*, p.109) Instead of a "steady state," the ecologists found that "an unceasing barrage of perturbations" is "an absolute requirement for sustaining life." (Ibid. p.361) The New York Times reported that this new evidence-based science has led many ecologists to abandon the "steady state" ecology in recognition that "nature is actually in a continuing state of disturbance and fluctuation. Change and turmoil, more than constancy and balance, is the rule." (Ibid.p.361) And what is more, they found that biodiversity flourishes in these conditions.

To give two quick illustrations: A few years ago, millions of acres of old growth forests in the West Coast of the US were locked up and whole logging communities were left unemployed - all in the interests of saving the Spotted Owl. But later research established that the Spotted Owl preferred habitat where human activities had disturbed the vegetation in a whole variety of ways, producing a patchwork of open grasslands and under-story vegetation. This kind of landscape fostered more variety in the wildlife populations and better hunting conditions for the Spotted Owl. The same thing was found about the Condor. There is a place, of course, for wilderness and old growth forests, but

we can no longer assume that these conditions support the most biodiversity. They generally don't.

The most amazing research on biodiversity was reported in Newsweek International in July 2006.

Under the title of *New Jungles*, the article reports that many animals, birds and plants now prefer the city. Berlin hosts two thirds of the 280 bird species existing in Germany. "You can take any big city and find more species and more diverse habitats than in just about any national park or nature reserve," says Josef Reichholf, professor of ornithology at Munich's Technical University. "Both in animal numbers as well as species diversity," he says, "cities beat the countryside hands down." So animals like to be around humans a lot more than some wildlife lovers think!\*

\*The urban colonies of "Flying Foxes" in the Tweed-Gold Coast region have nothing to do with the supposed destruction of their habitat. This region boasts five World Heritage National Parks comprising thousands of hectares of rainforest. You would be hard put to find a fruit bat in this vast rainforest habitat. Nowadays they prefer to live in town.

As an interesting aside, it seems that about the same time as the new cosmologists were blowing "the steady state" universe of Fred Hoyle and company out of the water with evidence of the rapidly expanding universe of the Big Bang, the new ecologists were making nonsense of the old theories of a "steady state" eco-system. The pity is that most of our current EPA's, planning instruments and NPWS/DEC authorities are based on the outmoded myth of the "steady state" that has never existed nor will ever exist on our planet.

**Watson:** Lyall Watson is a brilliant biologist who wrote a bestseller called *Supernature*. It endeared him to a lot of nature worshippers. They were soon disappointed, however, for Watson wrote another book called *Dark Nature*. It highlighted Mother Nature's darker side. "It is a jungle out there, writes Watson, "a war very often of all against all, in which ten per cent of all known species are parasites, whose job it is to harass, weaken and disfigure others...The romantic, carefully censored world of televised nature conceals the brutal truth, which is that most of the creatures on this planet live in constant and justified fear of the rest, or pay their way as slowly dying hosts to unthinkable lodgers... 'The universe that suckled us' rails Dillard, 'is a monster that does not care if we live or die.' And that is true. Nature has little, in a moral sense, to commend it." Quoting one of Charles Darwin's greatest apologists, Watson declares, "Mother nature is a wicked old witch."

**The Medical Profession:** A recent edition of *The Australian Doctor* featured a cartoon that has a patient saying to his doctor, "Nothing man-made thanks...I only believe in natural things." To which the doctor responds, "Like Malaria, Tuberculosis, Legionnaires, Cholera, Meningococcal, AIDS, SARS ...and earthquakes, tsunamis and cyclones!"

I don't want to trivialize the damage we humans are capable of inflicting on the earth and on one another.

But if some people want to get into the blame game, let's keep this in perspective. The Spanish Flu killed three times more people in 1918 than had been killed in the whole of the First World War. Every year a natural water-borne pathogen kills 3 million Third World children with dysentery and diarrhoea. Malaria – caused by a natural parasite – kills over 2 million people a year, including one child every 15 seconds. Every great human pandemic – from the millions killed by the Bubonic plague in the Middle Ages to the millions killed by AIDS in our generation – has been the work of some naturally occurring pathogen. When it comes to the extinction of species, Mother Nature has extinguished more than 90% of all the species that have ever lived on the planet, and before humans arrived.

A medical educator with extensive experience as a GP and as a specialist recently told me, “About 90% of what medical specialists do and a good 50% of what GPs do is to undo or correct Mother Nature’s stuff-ups - genetic stuff-ups, congenital stuff up, muscular/skeletal stuff-ups, auto-immune stuff-ups and all the stuff-ups caused by Mother Nature’s viruses, parasites and other pathogens.”

**Horticulture:** Since horticulture is just another branch of natural science, the things I have pointed out about ecology, ecology, toxicology, biology and pathology holds true in horticulture also.

*Tropical Fruit World* did not become an award-winning eco-tourist attraction by the “steady state” theory of ecology that insists nature should take its course without human meddling. I put my hand up for being guilty of a massive amount of meddling on my property, using bulldozers, excavators, land clearing of inferior vegetation, and then engaging in replanting 400 kinds of exotic fruit trees species, at least 100 kinds of indigenous bush foods and thousands of other native trees. Today there would be far more biodiversity at *Tropical Fruit World*, including bird life, than it had in any time in the past. About 150,000 domestic and international visitors come here every year to enjoy the sight, sounds and tastes served up by Mother Nature. I am very happy that all the human planning, direction and management that has gone into Mother Nature’s delightful transformation is subliminal.

As a tree doctor – for that is what I am in many respects – I have worked with about 500 kinds of tropical fruit species. Each species has its own peculiar problems, which means that I have worked with more kinds of viruses, fungi, other pathogens and pests than most fruit growers.

I use organic methods quite extensively, such as natural fertilizers, mulching, organic foliar sprays, the application of fulvic and humic acids to encourage beneficial soil organisms. But I could never be an organic purist who uses only so-called natural remedies. I give three reasons:

(1) Firstly, because there are diseases that cannot be overcome by so-called natural or organic methods, just as in the field of human health there are pathogens such as meningococcal and leukaemia that cannot be successfully treated with things like

Echinacea and grape juice. A case in point is the *phytophthora* fungus causing root rot in avocado trees.\* Unless avocado trees are injected with a synthetic chemical called phosphorous acid (potassium phosphide) there would be no avocado industry in Australia.

\*Many other tree species throughout the world, including some native forests, are susceptible to phytophthora. It has become a world-wide problem for agriculture and forestry.

(2) Secondly, the organic or of so-called natural method of producing food is not a practical option for producing enough food to feed the world. Norman Borleng is the father of the “green revolution” in high yield agriculture that has already saved millions of people from starvation since 1960. He says that unless we use synthetic nitrogen, we would need to destroy half of the world’s forests to graze enough cattle to produce the amount of manure required to replace synthetic nitrogen. But then he pointed out, the plant does not know the difference between an ion of nitrogen that comes from animal manure and an ion of nitrogen that comes from synthetic nitrogen. Organically grown food is therefore an elitist option for a few wealthy people of the First World. As Richard Leakey, the great African anthropologist once quipped, “You have to be well fed to be a conservationist.” I would suggest that a month without soap or toilet paper might convince a lot of people not to be so biased against human technology.

(3) Some food crop diseases, such as the Panama and Bunchy Top viruses in bananas, are totally incurable. Since bananas are seedless and are propagated only by cuttings, there are no genetic variants that may prove resistant to some of these incurable diseases. The only long term solution for the banana industry, therefore, is biotechnology. Biotechnology has also developed vaccines for some African diseases that can be bred into bananas for the benefit of millions of poor people, as in Uganda, who subsist mainly on bananas. In 2000 a group of scientists, using biotechnology developed Golden Rice, a strain of rice which contains enough beta carotene to prevent 1 million poor people per year who subsist mainly on rice from going blind and dying of a Vitamin A deficiency. Greenpeace and fellow travellers have been so effective in their opposition to biotechnology, that Golden Rice, which has passed all safety tests, has not been released. Greenpeace’s ideological opposition to biotechnology is apparently more important to them than a million lives a year. Norman Borleng, who knows more about feeding the world than any other person who has ever lived,\* says that biotechnology is needed to help the Third World in its struggle to find enough food to feed its people. But again, maintaining their bias against human technology is more important to the eco-fundamentalists than feeding the hungry.

\*See Leon Hesser, *The Man Who Fed the World*, a biography of Norman Borleng, the 92- year old (and still working) Nobel Peace Prize winner (1970) who is regarded by many as the greatest human being alive on the planet today.

**The Way Ahead:** The environmental movement began as a protest against Western culture’s alienation from nature. This alienation was said to have its roots in the Judeo-Christian heritage that sets man apart as a special creation above the natural kingdom (see Genesis 1:28, 29). Environmentalism advanced the antithesis that puts an all-wise Mother Nature on a pedestal above the human race. The natural is lauded and, to quote an old one-liner, “only man is vile.” There is a very pervasive anti-human bias in

environmentalism, and it is expressed in a bias against human technology, economic growth and human prosperity. Global warming theory is popular because it is just another big stick to beat up on human activity. Human activity cops the blame for everything from the disappearing green tree frogs to almost any natural disaster. It is as if Augustine's old doctrine of original sin has come back to haunt us again. It was a doctrine that said every single calamity on the earth, including the disaster of death itself, was all man's fault – or was it woman's fault? Anyhow, in this present orgie of human blaming, eagerly supported by media sensationalism, the alienation of man from nature has become worse than what it was before environmentalism tried to correct it.

I want to propose that we look at our human relationship to nature in a new way. This will be like putting on a whole new pair of glasses that puts biotechnology and every other kind of human technology in a much more positive light.

I propose that we recognize that the same natural evolutionary process that brought bees, birds and mammals into existence, has also brought *Homo sapiens* into existence. By saying this I am not trying to empty this emergence of everything of its awe and wonder. I am just pointing out the scientific reality that humankind emerged through the same natural processes as every other living thing. This means that the human species is nature too.

If every other form of life made up of living cells with genes and DNA is what we call *nature*, then *Homo sapiens*, whose genes are 98.7% the same as the chimpanzee, is also *nature*. When ants accomplish an amazing feat of technology in constructing a termite's nest, or elephants make water holes with their feet, or beavers construct a dam across a stream, we call that *nature*. On what basis can we then say that human technology is man-made rather than natural? This is philosophical and scientific nonsense, yet we keep repeating this nonsense like the slogan of the pigs in *Animal Farm*, "Four legs good, two legs bad" – as if what is done by a creature with four legs, six legs or no legs is natural and must be good for the environment, whereas what is done by a creature with two legs is man-made and must be bad for the environment.

If human intelligence evolved through the same natural process that produced a fox's cunning and a beaver's dexterity, then all human intelligence is natural and all human technology is natural. I am not saying it is necessarily good, but it's undeniably as natural as the technology of a bee hive, the weaving of a spider's web or the navigational equipment of migratory birds.

In human consciousness nature has finally become conscious of itself. "We may think of ourselves," says the great mythologist Joseph Campbell, "as the functioning ears and eyes and mind of this earth." Heretofore nature could only act in a random order of hit and miss. As such, nature has often been wasteful and prone to structural flaws, as the ABC science reporter, Robyn Williams, has made all too clear in his recent satire, *Unintelligent Design*. But now Mother Nature has acquired in this human mind what Julian Simon has called "the ultimate resource," and a power that the brilliant Princeton physicist, Freeman Dyson, has described as being "infinite in all directions."

“Nature has structural flaws and physical limitations” writes Greg Easterbrook (*A Moment on the Earth*) “Genus Homo may be able to change that. People may be here because nature needs us – perhaps needs us desperately... There is no reason in principle why nature ought to oppose the arrival of the high-speed analytical powers of the mind. Nature may have been dreaming of these very powers for 3.8 billion years.” (pp.668-669). This is why the late physicist Heinz Pagel could write in *Dreams of Reason* that it is high time that we discard “the radical distinction between mind and nature.” This includes, of course, the distinction between natural and man-made.

I come back to the original question, Does nature know best? With her newly acquired thinking powers, I would have to say that potentially and ultimately the answer may be “Yes”.

A Condensed Bibliography of Most Helpful Authors

Alston Chase, *In a Dark Wood. The Fight over Forests and the Myths of Nature*

*Playing God in Yellowstone. The Destruction of America's First National Park*

Lyall Watson, *Dark Nature*

Greg Easterbrook, *A Moment on the Earth. The Coming Age of Environmental Optimism*

Peter Huber, *Hard Green. Saving the Environment from the Environmentalists*

Julian Simon, *The Ultimate Resource*

Freeman Dyson, *Infinite in All Directions*

Joseph Campbell, *Myths to Live By*

William J. Bernstein, *The Birth of Plenty. How the Prosperity of the Modern Age was Created*

## **BOB BRINSMEAD**

Bob Brinsmead is a fourth generation member of an Australian farming family. In his tertiary education he majored in theology and later served for many years as the editor-in-chief of Verdict, an international journal of theology and philosophy. He was a co-founder of two para-medical organizations (International Health Institute and the First Australian Institute of Total Health) that did health education work in third world environments and health-risk assessment programs in Australia and North America.

In 1972 Bob settled on a farm at Duranbah in the Tweed region where he and wife Valorie raised their family of four children. Bob developed his farm into a tropical fruit paradise and an eco-park called Tropical Fruit World, which has been the most popular tourist attraction in the Tweed region for the more than 20 years. Tropical Fruit World won the NSW Award of Distinction for Environmental Tourism in 1991. Bob served as a Tweed Shire Councillor for 12 years and for a time held the office of Deputy Mayor.

IN JUNE, AT THE TWEED BUSINESS EXCELLENCE AWARDS FOR 2006, BOB BRINSMEAD WAS INDUCTED INTO THE BUSINESS EXCELLENCE HALL OF FAME. BOB BRINSMEAD HAS BEEN A MAN WITH A WIDE VARIETY OF INTERESTS, BOTH INTELLECTUAL AND PRACTICAL. HE HAS ALWAYS BEEN SOMEWHAT CONTROVERSIAL WITHOUT BEING DISAGREEABLE, WELL READ WITHOUT BEING OPINIONATED.