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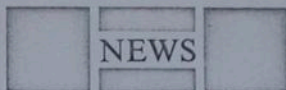
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# Sierra Club Bulletin

VOLUME 55 • NUMBER 5

... TO EXPLORE, ENJOY, AND PROTECT  
THE NATION'S SCENIC RESOURCES ...



## POWER CONSUMPTION

Alleged power demands and utility advertising were high priority items on the agenda of the Sierra Club Board of Directors at their regular meeting May 2 and 3 in San Francisco. Concerning power needs, the Board resolved: "The Sierra Club believes that the generation and use of electricity in the United States have increased to the point where their adverse effects on the total environment are evident, unmistakable, and undeniable. All forms of electrical power generation, whether hydroelectric or by steam produced by nuclear reactors, or the burning of fossil fuels, can only destroy what remains of the beauty and habitability of the earth if allowed to continue to proliferate. The Sierra Club opposes the concept of the inevitability of continued escalation of power needs, and believes that measures to effect economies in the use of electricity must be taken without delay."

The resolution on utility advertising stated: "The Sierra Club urges immediate enactment of legislation by each of the United States to prohibit any franchised electric or gas utility, either publicly or privately owned, from engaging in any form of advertising conceived, designed or intended to cause any increase in the consumption of electricity or gas, and to prohibit any and all other activity, on the part of such utilities, to promote use of gas or electricity." The Board instructed the staff to prepare pilot legislation to end utility advertising in California and New York.

## WILDLANDS

Concerning wild and scenic areas, the Board took the following actions: (1) stated that the establishment of a Big Thicket National Park in Texas must be an urgent priority in the expansion of the National Park System; (2) supported establishment of a Lopez Canyon Wilderness Area in the Santa Lucia Range east of San Luis Obispo, Calif.; (3) supported reclassification of the present Uncompahgre Primitive Area in Colorado as a wilderness with two units of 70,000 acres and 17,000 acres, respectively, and a Trico Peak Scenic Area of 50,000 acres; and endorsed the recommendation of the Greater Sawtooth Preservation Council for a Sawtooth National Park of three units — Sawtooth, White Clouds-Boulder, and Pioneer — with an adjacent national recreation area, producing a total transfer to the National Park System of approximately 1.6 million acres.

CONTINUED ON PAGE 22

Cover: Bolinas Lagoon, California, one of the last relatively unspoiled estuaries on the west coast. See page 4 for an article on the status of the nation's estuaries and coastline.

CONTENTS	PAGE
OCEANS EDGE	5
MAINE TIMES By Eleanor Sterling	8
PROBLEMS OF EXPANDING POPULATIONS By D. Wolfers	10
AMERICAN RIVER By Marion and Dan Kane	16
BOOK REVIEWS	21
WASHINGTON REPORT	23

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THE SIERRA CLUB,\* founded in 1892, has devoted itself to the study and protection of national scenic resources, particularly those of mountain regions. Participation is invited in the program to enjoy and preserve wilderness, wildlife, forests, and streams.

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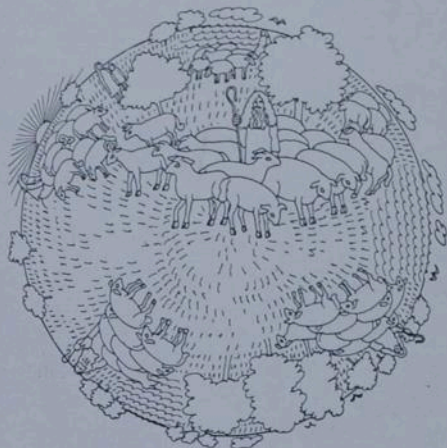
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## PROBLEMS OF EXPANDING POPULATIONS



By D. Wolfers

The current human ecological crisis derives from the great technical advances by which man has placed himself in the position of a (self)-protected species for whom natural ecological regulation is suspended. Inevitably his numbers have increased to the point where all the resources of the Earth cannot supply his wants.

There have been four distinct forms of organization of human life — arboreal, pastoral, agricultural and technological — and each change from a more primitive to a more advanced organization has been accompanied by the disturbance of an established population balance, followed by a phase of rapid growth, and then the re-establishment of demographic stability. We are at present involved in the latest of these transformations and, with the limited perspective of the human life-span, have difficulty in seeing how it will end.

In each of the three past states of demographic balance, corresponding to arboreal, pastoral and agricultural society, that balance was determined by

natural principles so that, growth being inhibited by the unchanging abundance of resources, death rates automatically adjusted to the prevailing birth rate. This adjustment did not mean that birth and death rates were the same every year, but there were periodic peaks of deaths, brought about by famine, epidemic or war, which irregularly restored a supportable population density. The current imbalance is likely to be resolved on similar terms if direct action is not taken to avoid it. But we now have the technical and social means of restoring a balance on terms more acceptable to human aspirations than the natural balancing mechanism.

Population trends in the 10,000 years of the agricultural phase show that throughout this period minor improvements in the availability of resources made possible slow but distinct growth of world population at a rate somewhat less than one per thousand per year. Meanwhile, high birth and death rates (about forty per thousand) prevailed constantly, and populations



ILLUSTRATIONS: VERNON KOSKI

were everywhere and at all times "young."

#### Early Disturbances of Balance

The first stirrings of disturbance of this balance are now seen to have begun in about 1650 when, in response to quite small improvements in agricultural practice, and perhaps also political organization, the rate of growth of world population more than trebled to about three per thousand per year. This change occurred simultaneously in Europe and Asia. In 1750, with the agricultural revolution in full swing and the effects of the industrial revolution beginning to be felt, it is clear that a major discontinuity had occurred in those countries that were affected; growth rates started increasing to levels like ten to fifteen per thousand per year. By now, production was leaping ahead of consumption and the determining factors of rates of growth ceased for the time being to be economic and became biological; the link between birth and death rates was broken and they were able to act as inde-

pendent variables.

The first effect of this change was the disappearance of mortality peaks. Food production and distribution had so improved that adverse seasons no longer produced famine, and nutritional standards had so changed that even though conditions of crowding and sanitation may have been worse than ever, epidemic disease was no longer able to decimate populations. Political organization had become so macroscopic that the toll of warfare became too selective to have important demographic consequences. Next came a steady decline of annual death rates in response to innovations in environmental sanitation and curative medicine and rising standards of nutrition — a process still continuing although with diminishing returns. The third effect, delayed for more than a century after the initiation of the first, was the long steady decline in birth rate, stretching in the United Kingdom over the whole period 1880-1930. No contemporary analysis of the causes of this decline exists, but it is safe

to say that it reflected the adjustments made by individuals to radical changes in conditions of economic and social competition. An important secondary effect of this decline in birth rates was the transformation of the population to an older age-distribution, with a consequent braking effect on the decline in death rate and a temporary alleviation of the dependency burden.

From 1930 onwards little change has been registered in the demographic indices of developed countries, growth rates fluctuating between three and ten per thousand per year, with manifest full independence of death rates from birth rates.

### The Developing World

Although such high growth rates cannot continue for ever, they can be sustained for some generations without bringing inevitable disaster. The current crisis arises from a recognition of the potential consequences of continuation of the quite different trends in the developing world.

By the beginning of the twentieth century, moderate growth rates of about ten per thousand prevailed in most agricultural lands. This situation reflected the pacification, aggregation, and administration imposed by the colonial powers and tutelary agents. Public health advances, particularly in tropical medicine, began to reduce the force of epidemic scourges, and the concept of famine relief made some progress. It is, however, only since the Second World War that a manifestly insupportable imbalance has been recognized. Countries which in 1939 were economically and socially stagnating in subsistence agriculture emerged in 1945 with political groups determined to speed them into the maelstrom of the modern world. Not only was production set for continuous expansion and mechanization, but a new spirit of interdependence led to the limited redistribution of foodstuffs under the aegis of United Nations agencies and with the help of food surpluses in advanced countries. Although violence was involved in the achievement of political independence by many developing nations, the previous pattern of recurrent tribal raiding was prohibited by the consolidation of what were in pre-colonial days dozens or hundreds of autonomous groups into large nation states. With neither famine nor war to restrain numbers, the importance of the spectacular application of preventive medical techniques (often, as with DDT and penicillin, developed during the Second World War) was enhanced, and death rates declined throughout the world at an unprecedented rate.

### Rate of Growth Today

Growth rates in developing countries at present vary between twenty and forty per thousand per year, representing, on exponential projection, periods of doubling of between 18 and 35 years. The most generally accepted estimate of the current growth of world population is twenty-one per thousand (doubling every 33 years) with a strong accelerating trend. Estimates of the probable future of development of world population prepared by the UN Demographic Division suggest a total of 7,000 million by the year 2000 compared with the present 3,500 million.

The expansion of a species ten-fold in a mere fourteen generations is, of course, a remarkable success story — in view of the complexity of human requirements it is almost a miracle of adaptation. Furthermore, there can be no doubt that when the limits of sustenance are reached the increase will be arrested by the customary balancing mechanisms of ecological logic.

Although some people believe that the problem can therefore be safely left to solve itself, the likely resolution without deliberate action is not the introduction of low birth rates but the restoration of high death rates. The spontaneous orderly unfolding of a demographic-economic transition is most improbable in the circumstances of the developing world, for the cause and effect sequences which led to the slowing of European growth are all running in reverse. Population growth, death control, and the expansion of the labor force are proceeding rapidly while those whose job it is to increase economic growth, birth control and employment opportunities strive to keep pace. The problems of capital formation are particularly acute, for not only are the demands for capital inputs to support the expanding population crippling, but the ruthless reservation of resources for capital at the expense of consumption, which darkened the lives of town dwellers in nineteenth century Europe and starved the peasants of Russia in the 1930s, is no longer morally acceptable. By increasing the denominator of every fraction, be it literacy rate, doctor-patient ratio, proportion of labor force gainfully employed, or income per head, a rapid rate of population growth leaves government and people producing frantically in order to maintain their situation. Although economies of scale may accrue as the population increases in some countries, in most the scale is already so great that no real effect of this kind can be demonstrated. While in some countries with vast hinterlands no perceptible change is taking place in the ratio of population to natural resources, in others

this ratio is becoming critically high, and in yet others, principally small islands, actual space is running out. Because the flow of international migration is blocked in almost every channel and will surely remain so, these islands are experiencing the crisis in its most acute form. Because of these considerations, if no action is taken to limit population growth it is likely to continue with no substantial change in standard of living or national economy until the problem becomes too great to cope with and the system itself collapses under the administrative burden of numbers and the disappointment of perpetual deferment of hopes. If this should happen, large tracts of the Earth will return to jungle law, de-population will take place and an entirely new set of problems will arise.

This catastrophe is not an immediate prospect, nor likely to occur on a world-wide scale. Some favored developing countries, such as Singapore, Venezuela and Israel, have rates of economic growth large enough to sustain the chain reaction of development long enough to produce the social changes which we assume to be sufficient to stimulate spontaneous fertility limitation; others are sufficiently sparsely populated in relation to their resources to be able to grow rapidly for a very long time before there is a qualitative change from rural poverty to chaotic destitution. But these countries will, if they do not act soon to limit growth rates, have missed the only foreseeable opportunity to build graciously advanced societies free of the tragic squalor which has accompanied industrialization and demographic transition in the western world.

#### World Situation

While each country faces its own population dilemma, the world as a whole is not exempt. The "green revolution" has given a temporary advantage in the race to keep world food supplies from becoming yet more inadequate to meet growing needs; modern public health makes it difficult to visualize uncontrollable pandemics sweeping the world; nuclear weapons appear at present to be held under firm restraint. The crucial areas of world concern are now atmospheric pollution, shortage of water and the potential exhaustion of minable minerals. In these respects we live in a fool's paradise where each has faith in the ability of the others to solve problems too difficult for himself. Aesthetically too, and in relation to the intangible "quality of life", more and more people, unable to visualize institutions which can preserve what man has held valuable in the past into a teeming future, view that future with perhaps unwarranted despair.

Action is, however, being taken. In almost all cases this takes the form of family planning programs, fully organized by government, supported by government or permitted by government. The pattern of introduction of these programs was, only 10 years ago, a rather unedifying spectacle in which enthusiastic voluntary agencies seemed to drag suspicious governments into a series of tentative steps. Only after feeling their way for some years did governments come to embrace programs enthusiastically. This situation is now changing, and genuine government leadership is appearing in an encouragingly large number of countries.

Government reluctance, and in places opposition, stems from several considerations, of which the fear of provoking opposition and courting unpopularity is the least realistic and the most important. It is in dispelling the myth that most peasant populations would be outraged by exposure to birth control services and propaganda that the social survey has made its outstanding contribution to the solution of the problem. Sample surveys, referred to as KAP surveys (knowledge, attitude and practice), conducted in dozens of different settings, seem to have uncovered a very strong demand—commonly 70 to 80 per cent of female respondents—for the facilities for controlling fertility, and to have demonstrated that, almost regardless of the situation prevailing, most couples want relatively small families (three or four children). There have been some exceptions to these generalizations, particularly in tropical Africa.

Difficulty also arises in countries where political power is shared between two or more ethnic or tribal groups of approximately equal numbers. In these circumstances each group fears that their own members, by adopting family planning, will encompass their ultimate political extinction. The view is quite widely and influentially held in Africa and Latin America that "population control for the developing countries" is a manifestation of similar tribal thinking on a global scale by the developed countries, and this naturally is responsible for bitter opposition.

The unreal basis of official Roman Catholic thought on the subject hinders developments in predominantly Catholic countries, but family planning programs with declared health and welfare objectives substituted for demographic aims are making headway.

#### Outcome of Programs

It is too early to make more than the most tentative predictions of success or failure for family planning programs, and it is likely that some will be successful and others fail. The population control objective requires that two stages be accomplished. First, the

adoption of birth control by most of the population efficiently enough to ensure that births correspond closely with numbers desired, and, second, the reduction of numbers desired to the level where development success is assured.

The first is certainly an easier objective to attain than the second, but, except in a few cases, which as they appear come to be described as special, there is little encouraging to report yet. For reasons related to the austerity of Christian morality, contraceptive technology has received far too little attention from scientists in the past. The crisis has arrived when we have no satisfactory techniques of contraception to offer the clients recruited in these programs. Methods which have proved successful for highly motivated western populations are either too difficult or unpleasant for the mildly motivated to use regularly (diaphragm, condom); have too many unwelcome side-effects (IUD, pill, injection); require an unrealistic degree of cooperation (pill) or are too ineffective (coitus interruptus, spermicidal preparations). Although many millions in the developing world are struggling to use these methods, follow-up studies show that no more than half are able to persevere with any one method for a prolonged period. The techniques of sterilization, particularly of males, are much more satisfactory, but their adoption requires a finality of decision which few can muster until their family sizes are already excessive. The uncertainty of survival in areas where rates of infant mortality are high is, of course, a further deterrent.

The demographic history of Japan in the 1950s and contemporary East Europe shows that the practice of abortion alone is capable of producing dramatic effects on the birth rate, but the applicability of this to less developed countries is dubious. Neither the level of motivation nor the availability of medical services is of the same order in most of these. Additionally, stubborn adherence to rigid interpretations of the sanctity of life, particularly in Moslem and Catholic countries, rule out this method at present.

It is not known whether the availability of more acceptable forms of contraception (and much current research is being devoted to their development) would have a favorable effect on the numbers of couples adopting contraception, but it is certain that it would enhance the effectiveness of practice of those who do.

The discrepancy between the proportions of any population studied who assert their willingness to practice contraception and those who actually do so when it is offered is very large, and offers a great challenge to the social scientist and psychologist to un-

ravel the complexities of decision taking involved. One of the least understood factors is the part played by males in this process.

Family planning programs with demographic objectives are recent innovations. The earliest was in 1952 (India) but remained in very low gear till 1964. The real history of such programs dates back only to 1962. So far very few participating countries have recorded substantial gains, and there is no lack of critics who attribute these to factors other than deliberate programs. Although no change has been recorded in the birth rates of countries such as India and Pakistan, it should be remembered that in these countries vital registration is grossly defective, that changes in the age structure of the population are producing conditions favorable to increasing birth rates and that millions of couples have attempted birth control for the first time during the past few years.

#### High Fertility Favored

The complementary task of introducing the "small family norm" has, in spite of considerable effort, met even less demonstrable success. While families of three children or fewer "fit" urban, industrialized societies which put premiums on higher education and provide comprehensive welfare services, it is the large family which until recently has enjoyed advantages in the rural environment which still prevails for 80 per cent of people living in developing countries. Free labor for the farm and the security of numbers and continuity in ill health or old age were the principal economic gains, while the extended family system spread the very light burdens of child-rearing in such a way that each additional child was almost no extra burden. Because very high levels of child mortality prevailed until recently, it is not surprising that a mutually supporting structure of social, moral and religious doctrine has developed to protect and advance the ideal of high fertility. It matters little that, after a generation of rapid increase, fragmentation of farms has become more important than labor supply, and after a generation of independence the burden of education is growing to rival the benefits of mutual support; the time scale of change in social and economic institutions is now far more contracted than that of change in cultural outlook. Automatic reacculturation cannot be relied on, and the task of changing attitudes falls to the propagandist, the educator, and perhaps soon the tax gatherer.

The "small family norm" will not, of course, make any headway where extreme levels of child mortality prevail, so that a precondition of lowering birth rates is the necessity to lower death rates. The most urgent

preparatory task is to improve the coverage and standards of maternal and child health services in rural areas of the developing world; this is, of course, enormously costly. It is only, however, in the context of a secure and comprehensive health service that family planning can cease to be a foreign gimmick and become a settled part of life.

#### Campaign Media

Posters, films, radio talks and earnest face to face encounters multiply throughout the developing world to bring the message that two or three children are enough, but, in the hectic urgency of this campaign, time has not been found to evaluate the efficacy of the media used. The possibility of attempting to indoctrinate school children is at last being canvassed, but there is resistance because of the sexual component involved. School activity, to be effective, must take place in primary schools, because too few children attend higher grades for a campaign to have worthwhile results. Numerous suggestions for giving financial incentives to parents to have small families or imposing penalties on those who have large ones have been made. Almost without exception these prove relatively easy to implement in the highly organized money economy of an industrial state, which does not need them, but quite impossible in areas of subsistence agriculture where taxpayers form a small élite of the population. Meanwhile, the world is not ready to surrender another of its primitive freedoms by accepting the introduction of licenses for childbirth.

Although many programs express their objectives in terms of the attainment of specific rates of growth by a certain date, few if any of these objectives have a more rational basis than the hope that the objective can be attained. So many ecological studies have been made too late that there is clearly a great urgency for the revival of studies of optimal population growth so that, when conditions are achieved which permit the induction of massive changes in fertility, a rational policy will be possible.

The situation at present is undeniably confused, with hope and despair about evenly balanced. This is inevitable in the first decade of serious attempts to deal with a problem of this size. Clear outlines of the tasks to be performed are, however, beginning to emerge. Of these, surely the most difficult and most important is to reduce child mortality as far as possible and provide a comprehensive network of health services throughout the developing world. This is the carrier wave for broadcasting family planning. A process of re-acclimatization must be accomplished, and this implies indoctrination of populations at impression-

able ages — in early school years, and as a corollary it implies bringing the whole child population to school. To these extents, medical and educational, population control depends on progress in development. There are, however, activities which may bring results in relatively unpromising situations. It is agreed that too frequent child-bearing is physically harmful to women, and this may form the basis for the adoption of a more authoritarian attitude to the prescription of contraception by members of the medical profession and their agents. Were the provision of contraceptive techniques as routine a part of the after-care of childbirth as iron for the treatment of anemia, or insulin for diabetes, great results might be achieved even in areas now hopelessly unprepared for radical social change.

#### Impact of Abortion

The liberalization of abortion laws will likewise have an impact, although necessarily one which is dependent on the availability of competent services to perform operations. Meanwhile the search for reliable and safe medical abortifacients must be pursued, as must the search for better contraceptives.

It is not easy to assess the ultimate impact of the torrent of "educational" material now inundating adult populations in the developing world. There are good reasons to believe that this insistent reiteration may, after a relatively long time, quite suddenly bring about a change in popular attitudes. Familiarity and legitimation are powerful agents for the dissolution of resistance. Patience is therefore important.

If we look more than a generation or two ahead, we are forced to come to terms with the ecological basis of the problem. At present the human race is appalled by the recognition of its dramatic rise to maturity with the accompanying achievement of the potential for self-destruction, for irretrievable pollution of the environment, and for exhaustion of key materials as well as for over-crowding itself. An age of centralized planning is on us as part of the unavoidable logic of development and progress. That planning already involves production and agriculture, education and welfare, research and development, distribution and transportation, the siting and distribution of population and countless other aspects of our lives. It is inevitable that it will soon come to embrace the numbers and then the quality of population, for all else will come to depend on these.

*Mr. Wolfers is with the Population Bureau, London, England. This article is reprinted from Nature magazine, February 14, 1970.*



# It's Maldistribution, Not Overpopulation

Zealots for abortion, population control, free [and possibly compulsory] contraceptives, and all that, must be dismayed as the 1970 census figures come in. Altho the American population generally has increased somewhat in the last decade, the birth rate has gone down.

Most large cities are smaller than they were in 1960. What does the Census Bureau mean by weakening the case of the anti-people people?

Take Detroit, a city I have known intimately ever since I was a little boy. Detroit's population has fallen by at least 169,000 since the last census; indeed, that city's population has diminished to what it was 17 years ago. Nor has there been the expected tremendous increase of Negro population: that element rose by little more than 11 per cent.

Detroit's birth rates have decreased. Since the last census, the white birth

rate has diminished from 19 per thousand to 15 per thousand; the black birth rate from 21.6 per thousand to 18 per thousand. Detroit's circumstances are similar to those of many other large cities, according to preliminary census reports.

## Small Towns Decrease, Too

Even small towns are complaining that the census-takers must have made a mistake. To their astonishment, the city fathers are informed that they have many fewer people than they had in 1960, and so must expect a decrease in various state and federal subsidies. My own county seat has lost more than 1,000 residents [a big chunk of 1960's population] and is trying to find them somehow; but the census figures will stand.

Where has everybody gone? Why, to the suburbs or to the country.

But it appears probable that final census figures will show that the rate of population increase in many suburbs, too, has been less during 1960-70 than it was in 1950-60. The American birth rate has been sliding downward—without anyone having legislated it that way.

The anti-people people's argument that our big cities suffer from hideous overconcentration of people is reduced to nonsense. Urban sprawl, indeed, is a problem; but downtown, and for miles round about downtown, we behold more urban deserts than urban jungles.

## Hint at a Conspiracy

Some of the "down with people" enthusiasts are so fanatic that they hint at the Census Bureau being involved in an evil conspiracy to increase "environmental pollution" by taking a low headcount.

But that won't wash. It's not merely the Census Bureau that gives us the facts. In Detroit, for example, the population survey was made by a local body, the Mayor's Committee for Community Renewal.

This country is not positively overpopulated, tho there is often a maldistribution of population — some regions being inhabited too thickly, others too thinly. But abortion and contraception wouldn't change that.

Ten years from now, we may find some liberals, who now agitate for public checks upon population, changing their tune. In 1980 some of these very same people may be demanding federal family subsidies to increase the population.

I'll oppose them then, too.

General Features Cont.

Chicago Tribune Aug 30/70

# ECOLOGY

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No. 1

## COMMENTARY

### THE BIOSPHERIC PACKING PROBLEM

The world has a packing problem. How are we going to fit three and one-half billion more people on this earth in the next 30-40 years? Most ecologists know that the packing problem is not simply a problem of human numbers; it is also a problem of size: people who have developed industrial technology take up more space, use more resources, have more opportunities to interfere with one another and require more rules to fit them into their environment. Most ecologists would also agree that the world could not support even its present three and one-half billions if all nations possessed Western technology and used it with the same lack of controls as we of the West now do.

More difficult to fathom has been the speed of development of the crisis. There has been a tendency to assume that it was a simple function of growth of population, doubling on a worldwide basis every 30-40 years. But the doubling time of technology is shorter, perhaps by half. Measured by the production of fossil fuels, technology has a doubling time of only 15-20 years. The packing problem must become more acute, not as a simple function of growth of population or growth of technology, but as the product of these two growth curves. Thus the Biospheric Packing Problem is aggravated by a doubling time that must be measured in years not decades, perhaps 10-20 years, but not 30-40. As the packing problem becomes more acute, the job of government—providing the rules to regulate the packing—becomes more complex.

The Biospheric Packing Problem is formidable, imminent, threatening. It is sufficiently threatening to warrant political action equivalent to the 1963 Nuclear Test Ban Treaty under which certain nations agreed to forego nuclear tests in the atmosphere. Action of this magnitude requires not only convincing knowledge of the consequences of failure but also a clear basis for action. We

lack both at the moment. The scientific community has failed to provide the depth of understanding of ecosystems needed for wise action, preferring a different perhaps even opposite series of objectives in pursuit of excellence in intellectual activity. Driven by the mounting pressures and spurred more than a little by restrictions of budgets, scientists of many disciplines are turning now to examine the same problems ecologists have struggled with for decades.

In an attempt to focus this impetus on the larger questions of ecology, the Ecological Society of America with support from the National Science Foundation is undertaking a study of the need for, and the objectives of, a new national effort in the environmental sciences, perhaps in the form of a National Institute of Ecology. The new effort, whatever form it takes, might well augment and perhaps continue some of the studies initiated as part of the International Biological Program, thus strengthening the current efforts in ecology in the universities, and providing a new set of opportunities for scientists to examine the great issues of the environment with an intensity never before possible. There is real question as to whether the world can afford to wait for more study and more knowledge before acting to restrict the crisis; yet there is no question but that wise political action must be based on a greatly strengthened science of environment. A massive effort by the rich nations, now while they are still rich, is needed to understand and teach the broadest aspects of the crisis of environment. Only by a massive attack can the world provide the energy of integration essential for an enduring solution to the Biospheric Packing Problem. The need is huge and current efforts are small indeed.

George M. Woodwell  
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Upton, New York 11973

- Assume:
1. Average life of an individual is <sup>of period period to</sup> 50 yrs.
  2. Population doubles every fifty years
  3. Population at zero point is 1 unit (e.g. 1,000,000)

Then  $y$ , the population, will be expressed by

$$y = 2^x$$

where  $x$  is the no of periods (of 50 years) before or after the zero point ( $x$  neg for before and positive for after)

How many individuals are alive at any time during the interval from  $t_1$  to  $t_2$ ?

This no. will certainly be very nearly the same as if we ideal the situation still further supposing births take place only at the beginning of periods and deaths at the same times. Then our population curve would

show as



and the answer would be the same if the area of the rectangle

But the real cause results from unbalanced  
births & deaths, births exceeding deaths (on the  
average) to double population every period.

The answer to our question is thus

$$\int_{t_1}^{t_2} 2^x dx$$

provided we don't ask the formula for such  
a silly answer as  $\int_{t_1}^{t_1 + \frac{1}{2}} 2^x dx$ , but insist that

$t_2$  be at least 1 larger than  $t_1$ .

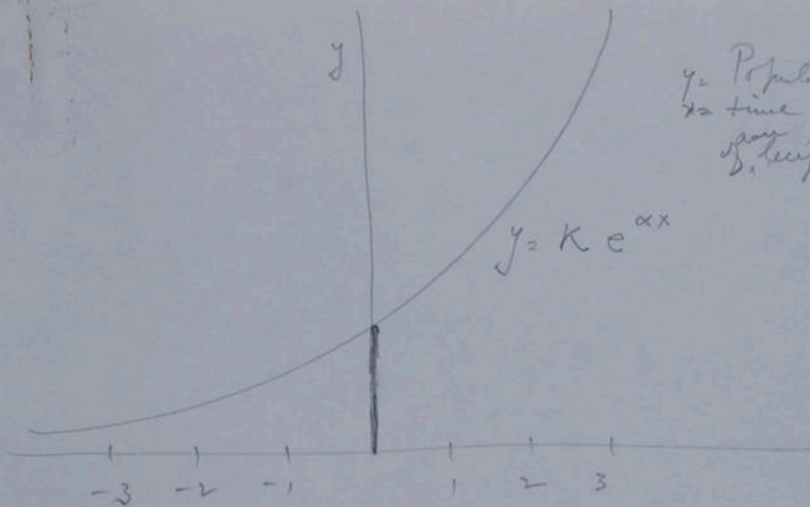
What then is the rational present population  
now living to all individuals already  
dead? (Hint +)  
The answer is somewhere between

$$\frac{2^{t_2}}{t_2 - 1} \quad \text{and} \quad \frac{2^{t_2}}{t_2} \quad , \quad \text{is} \quad \frac{2^{t_2}}{(\log_2 e)^{t_2 - 1}} \quad \text{and} \quad \frac{2^{t_2}}{\log_2 e^{t_2}}$$

or  $2 \log_e 2$  and  $\log_e 2$ , i.e. 1.386 and .693.

If we adopt  $\frac{2^t}{\int_{-\infty}^{t-\frac{1}{2}} 2^t dt}$  we get

$$\frac{2^t}{(2^{t-\frac{1}{2}}) \log_e 2} = \sqrt{2} \log_e 2 = (1.414)(.693) = .975$$



Then  $\int_{t_1}^{t_2} Ke^{ax} dx =$  total ind. living at some time between  $t_1$  and  $t_2$

$$\begin{aligned}
 ? \quad R &= \frac{\int_t^{t+1} Ke^{ax} dx}{\int_{-\infty}^t Ke^{ax} dx} = \frac{\left[ e^{ax} \right]_t^{t+1}}{\left[ e^{ax} \right]_{-\infty}^t} \\
 &= \frac{e^{a(t+1)} - e^{at}}{e^{at}} = \frac{e^{at}(e^a - 1)}{e^{at}} = e^a - 1
 \end{aligned}$$



$$\int_{-\infty}^0 e^x dx = 1$$

$$\int_0^1 e^x dx = e - 1$$

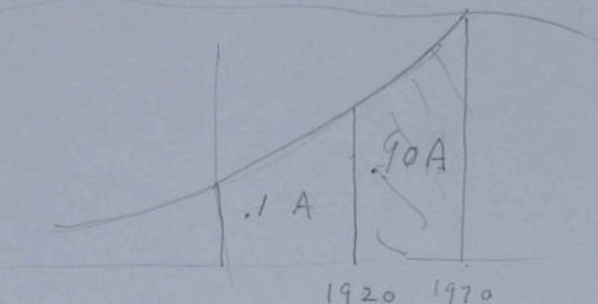
$$\int_{-\infty}^1 e^x dx = e$$

$$\int_1^2 e^x dx = e^2 - e = e(e-1)$$

$$e^\alpha - 1 = 9$$

$$e^\alpha = 10$$

$$\alpha = 2.3$$



$$Q = \frac{e^{\alpha+1}}{e^\alpha} = e = 2.7$$

-8350	5
1650	500
1850	1000
1930	2000
1970	4000

$$y = k e^{\alpha(x-\beta)}$$

$$y = k e^{\alpha(x-\beta)} = k e^{\alpha x - \alpha\beta} = k \frac{e^{\alpha x}}{e^{\alpha\beta}} = K e^{\alpha x}$$

$$500 = K e^{\alpha \cdot 1650}$$

$$2000 = K e^{\alpha \cdot 1930}$$


---


$$4 = e^{\alpha \cdot 280}$$

$$\alpha = \frac{\log 4}{280}$$

$$5 = K e^{-8350\alpha}$$

$$500 = K e^{1650\alpha}$$

$$100 = e^{10000\alpha}$$

$$\alpha = \frac{\log 100}{10000}$$

$$= \frac{2}{10000} = .0002$$

$$k e e = 10!$$

$$= \frac{.602}{280} = .00215$$

$$1000 = K e^{1450x}$$

$$4000 = K e^{1970x}$$

$$4 = e^{120x}$$

$$x = \frac{\log 4}{120} = \frac{.602}{120} = .005$$

$$2000 = K e^{1930x}$$

$$4000 = K e^{1970x}$$

$$2 = e^{40x}$$

$$x = \frac{\log 2}{40} = \frac{.301}{40} = .0075$$

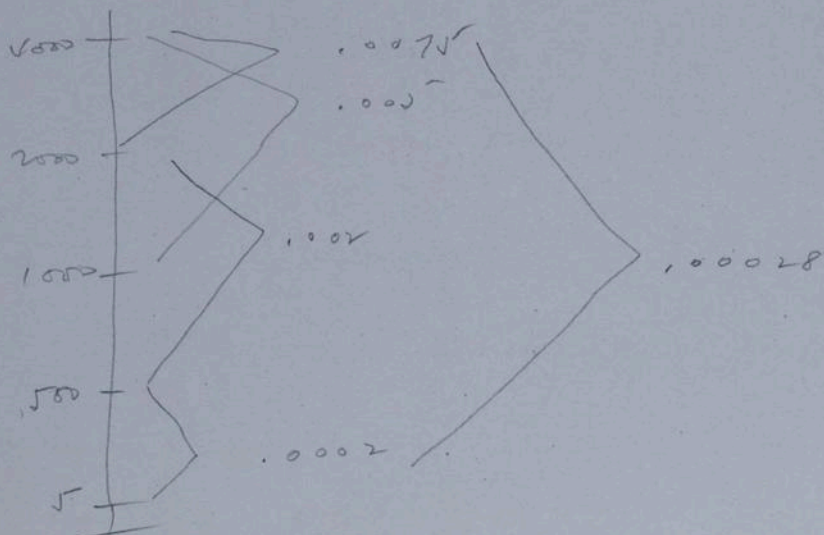
$$5 = K e^{-8350x}$$

$$4000 = K e^{1970x}$$

$$500 = e^{10320x}$$

$$x = \frac{\log 500}{10320} = \frac{2.903}{10320}$$

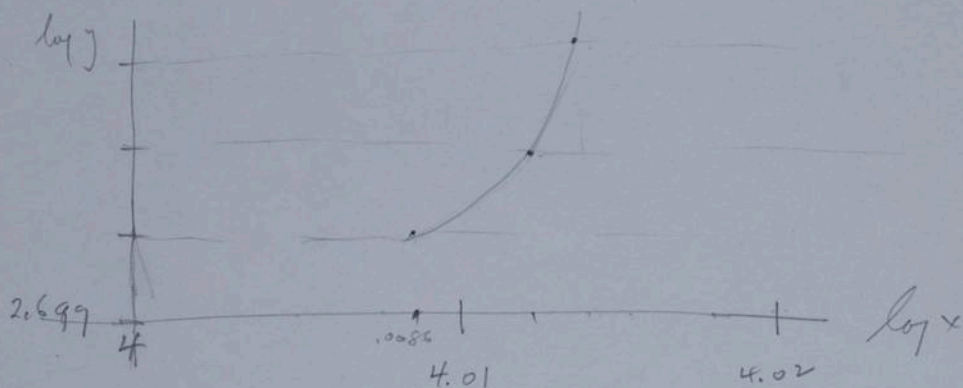
$$= .0002803$$



$$y = k e^{\alpha(x-\beta)}$$

x	y
-8350	5
1650	500
1850	1000
1920	2000
1970	4000

x	y	log x	log y	$\Delta \log x$	$\Delta \log y$
10000	5				
10000	500	4	2.699		
10200	1000	4.0086	3.000	.0086	.301
10280	2000	4.0120	3.301	.0034	.301
10320	4000	4.0137	3.602	.0017	.301



$$\log_{10} y = K e^{\alpha \log_{10} x}$$

$$2.699 = K e^{4\alpha}$$

$$\frac{3}{2.699} = e^{.0086\alpha}$$

$$1.125$$

$$\alpha = \frac{\log 1.125}{.0086}$$

$$= \frac{.05115}{.0086} = 6 \pm$$

$$3 = K e^{4.0086\alpha}$$

$$\frac{3.301}{3} = e^{.0034\alpha}$$

$$1.100$$

$$\alpha = \frac{\log 1.100}{.0034}$$

$$= \frac{.04139}{.0034} = 12.2$$

$$3.301 = K e^{4.0120\alpha}$$

$$\frac{3.602}{3.301} = e^{.0017\alpha}$$

$$1.09$$

$$\alpha = \frac{\log 1.09}{.0017}$$

$$= \frac{.03743}{.0017} = 22$$

$$3.602 = K e^{4.0137\alpha}$$

$\log \log x$	$\log y$	$\Delta \log \log x$	$\Delta \log y$
2.60206	2.699		
2.60299	3.000	.00093	
2.60336	3.301	.00037	
2.60354	3.602	.00018	

$\log \log y$	$\Delta \log \log y$
.43120	
.47712	.04592
.51865	.04153
.55654	.03789

$\Delta \log \log x$	$\Delta \Delta \log \log y$
.00056	.00439
.00019	.00364

*THE  
POPULATION  
BOMB  
threatens  
your  
future*



*HOW TO DEFUSE IT*

REPORT NO. 13  
SPRING 1970

THE VICTOR-BOSTROM FUND REPORT  
FOR THE INTERNATIONAL  
PLANNED PARENTHOOD FEDERATION



**POPULATION**  
A CHALLENGE TO ENVIRONMENT

FIRST NATIONAL CONGRESS ON OPTIMUM POPULATION AND ENVIRONMENT

65 E. HURON ST./CHICAGO, ILL. 60611/(312) 787-1114



PICK CONGRESS HOTEL / CHICAGO, ILLINOIS / JUNE 7-11, 1970

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\*As of 9 June 1970

A project of Congress on Population and Environment, Inc.

## TOPIC I - OPTIMUM USE OF NATURAL ENVIRONMENT

For the benefit of all people, present and future generations, we must reverse the swift and continuing deterioration of our natural environment. The responsibility for doing this belongs to each individual. We must direct our resources toward providing a richer life for humanity, and away from waste, destruction and death.

We seek a national commitment for a positive program to restore and maintain the delicate ecological balance on which our lives depend. We recommend the following three steps be taken.

1. Nationwide environmental zoning, preceeded by comprehensive, long-range land use planning. Specifically, we need a plan to protect current farm, wilderness, estuary, forest and park land from urban sprawl, highway encroachment, and industrial desecration. This zoning of our nation will be carried out by national, state, and local councils of ecological advisors after consultation with representatives of citizens to be affected.

2. We need to bring about a rapid end to the pollution of our earth, air and water. Specifically: Government shall assist more efficiently in bringing an end to industrial, agricultural and governmental pollution through exact and compelling legislation and enforcement coupled with tax incentives.

3. We call for the establishment of national service corps of men and women for the defense of our environment as an alternative to military service. The corps shall be charged with restoration of our cities, parks, recreation areas and wilderness. They shall be used to implement conservation projects deemed necessary by the councils of ecological advisors.

The human population has already strained the carrying capacity of our natural environment. To arrest this decline we recommend that we rapidly stabilize our population and make optimum use of our natural environment.

## TOPIC II - OPTIMUM USE OF MAN-MADE ENVIRONMENT

The factors involved in our present form of urban development are deeply rooted in society. Attainment of an optimum man-made environment requires not only a deeper understanding of what constitutes an optimum environment, but, if it is to be truly achieved, a significant reorganization and modification of all the components of our social order.

Such changes in our physical system necessitates changes in our values, norms, and organizational systems. Less than this will result either in a partial alleviation of the present environmental problems or in coercive action by government at a high cost to other societal values. While continuous growth is recognized as an infeasibility in a closed ecological system such as planet Earth, the unmet needs of the existing population will require new developments until the optimum population of the planet is afforded equitable and optimum life-supporting systems. The man-made environmental elements of these systems include such things as beauty, convenience, diversity, safety, privacy, dignity, equality of opportunity, and self-esteem as well as food, clothing and shelter.

The decision-making base for determining the optimum development of the man-made environment should be expanded to include natural resources ecologically involved in the decision - rather than only the economic factors immediately involved in the decision. The ecosystem and not the geo-political unit should be the primary consideration controlling man-made environment. Society must adopt a set of regulations and practices which permits the orderly, effective, and esthetically pleasing development of urban areas. Such regulations and practices must:

- (1) aim at eliminating the economically speculative aspects of land holding and development;
- (2) assure the full development of land prepared by the community for its growth; and
- (3) provide positive controls on the visual quality of the man-made environment and its impact on the natural environment.

In realizing the optimum use of man-made environment:

- (1) housing and transportation are two of the most critical problems that must be solved;
- (2) pollution must be viewed as an overriding issue; and
- (3) social, environmental and esthetic damages for governmental, and private actions must be made accountable and corrective actions or compensation should be required of the perpetrators.

SOCIAL AND PSYCHOLOGICAL ASPECTS  
OF THE POPULATION/ENVIRONMENT CRISIS

DECLARATION OF MORE GROUP THREE

1. The human species as part of nature.

We propose that the social and psychological problems confronting human beings derive in large part from a failure to recognize our dependence on the whole of the natural world. We suggest that the first step to practical solutions is the realization that humanity is part of, and should live in harmony with, nature.

An optimum size for human population, therefore, is one that provides scope not only for the fulfillment of human needs for all people, present and future, but also allows for the protection of other species, and the diversity of environments that nurture life on this unique planet.

11. Optimum population and optimum condition for human life.

We recognize that the size of the human population most conducive to social and psychological well-being can be calculated only with reference to an optimum level of living. If we have no aspirations for the way people live, we have no population problem. Optimum conditions for human life would provide not only that all people are nourished adequately for full physical, psychological, and spiritual growth, but that the provision of other important needs—those for clothing, shelter, education, space, and recreation — be sufficient to augment rather than repress the development of full human potential and dignity. Finally, an optimum psychological and social context for human well-being includes a social climate of respect for individuals and groups, regardless of race, sex or beliefs.

SPECIFIC PROPOSALS TO IMPLEMENT DECLARATION  
To foster these general goals we recommend:

A. First, since the disabling social and psychological consequences of population and pollution work disproportionately to the detriment of the disadvantaged minorities, we urge the recognition of the vital importance of achieving liberation and economic equality for the disadvantaged, which includes the social pollution of racism, discrimination, and calls for indifference to human needs.

ACTION IMPLEMENTATIONS

To implement these proposals we recommend:

1. That all population-environmental programs, public and private, urban and non-urban, national and international should consider social and psychological ramifications as primary dimensions of the supported activities, that is, that human needs be considered over and above the structural concerns of institutions.

2. That both the traditionally influential and the previously unheard must be involved in decision-making.

3. That guaranteed income as an economic base for optimum life-support be instituted; and that we restructure the existing tax system to achieve the above measure.

4. That we implement the recommendations of the President's Council on Civil Disorders (Kerner Report, 1969).

5. That a National Health Insurance plan be made available for all strata.

6. That child care, community planned and operated, be made available for all.

7. That to close the gap between the standards of living of people of the Third World and the affluent developed nations, the U. S. foreign policy adopt friendly, helpful attitudes toward indigenous popular movements in underdeveloped countries and cease supporting totalitarian, minority governments in order that Third World countries be allowed political, economic, and social self-determination.

B. Second, in recognition that the social-psychological conditioning of women and men seriously limits the options of both, and especially the realization of the potential of women, the central focus on the changing roles of women is mandatory. If we are to reduce population growth and change patterns of consumption, a healthy partnership of women and men in a fully egalitarian society will foster the social environment and social institutions needed to reverse pro-natalist behavior. Therefore:

**ACTION DEMANDS/STIMULATIONS**

1. To implement these proposals, we recommend the adoption of the Feminist approach, which values the individuality and equality of the sexes, so that girls and boys, women and men will learn to respect the privacy of person and gender.
2. Advocate and implement the proposition that women should be proportionately present on every public board and commission, and in every agency and public office.
3. We urge recognition of the importance of the mass media to effectively reverse pro-natalist policies. We propose that the Federal Communication Commission (F.C.C.) apply the doctrine of fairness and accuracy in portraying the present roles of women, and give recognition to the potential role changes of women and men that must emerge.

C. Third, we affirm the necessity of making optimum usage and distribution of resources consistent with human needs, and therefore propose:

**ACTION DEMANDS/STIMULATIONS**

1. That the federal government seek means to guarantee to every American the requirements of a decent living without subsidizing the excess resource consumption and pollution production of the total American economy. Specifically, we recommend a federal system of guaranteed minimum and maximum incomes for all families and individuals, redistributing income sufficient to free all Americans from the constraints of poverty. Maximum income levels should be established by thorough, complete, and up-to-date surveys of living costs, and should be sufficient to pay the full cost of adequate housing, food, clothing, and other essentials at current prices.
2. We believe that adequate health service is a right of every individual and to this point urge the establishment of free comprehensive medical care for every individual. Among these being the repeal of all abortion laws, availability of free birth control information and availability of free pre- and post-natal care. The immediate means of implementing the above is the enactment of the Yulgan Bill S2106. In accordance with the above, we also urge the reorientation of medical education towards the needs of people.
3. We recognize our present flow of resources through most government programs results in increased economic well-being of middle and upper class white Americans. Therefore, we recommend the reversal of resource flow in programs by putting the resources into the hands of recipient peoples and allowing them to control their usage.
4. We advocate the rehabilitation of all slaves, both rural and urban, and the guarantee of resources for adequate housing for everyone.
5. We advocate the establishment of adequate mass public transportation within and between cities, thereby decreasing need for private use of the automobile.

6. We are resolved to change zoning and subdivision regulations which restrict discrimination on an economic or racial basis, and which encourage wasteful creation of quarter, half and full acre plots, rather than smaller holdings with more useful green spaces and recreational facilities in common. The basic powers of land planning and land use regulation should be exercised by bodies covering broad and economically significant geographic areas, such as metropolitan areas or river valleys.

7/ *Among our most serious national problems is the growth of alienation, morale and related social pathologies. These to a large extent emanate from the growth of political, social and economic institutions which destroy opportunities for participation, belongingness, relevance and personal growth. Much greater attention must be paid by planners and policy makers to the development of social and physical environments which meet basic human needs.*

D. In order to influence or modify attitudes and current patterns of behavior, we recommend:

1. That it is the responsibility of all of us as delegates to this First National Congress on Optimum Population and Environment to report the consensus of our work groups, the thought and insight of our speakers and resource people, to the organization, groups, and institutions which we represent.

2. That it is the responsibility of this Congress to publicize and make available the proceedings of this body to government leaders including federal, state, or city; officials of private organizations whether conservation, welfare, religious, health, or social; the leaders of our educational, vocational training, and research institutions and foundations, including all levels from pre-school and day-care centers through college and adult-education programs.

3. That those who buy and sell advertising, and each and every one of us who consume the products of this advertising, consider the consequences of present patterns of life and act responsibly to adopt an ecologically-oriented ethic of behavior which takes into account the pressures of over-population as well as the results of pollution of our environment by greed, poverty, racism, and sexism (in alphabetic order).

4. That we initiate a major action research effort to determine the most empirically-effective method of changing current ideals about family size and actual childbearing behavior. It would study alternative methods of influencing or modifying existing norms.

5. That this Congress establish an agency, acting as a clearing house for information and research, which will affix an "ecological seal-of-approval" to these products, actions, and behaviors which minimize the degradation of our environment and all living things.

TOPIC IV

Governmental Approaches to Problems of Population/Environment

Section A.

The Government of the United States of America must adopt as a first priority a national environmental policy that will preserve, restore and create elements of our environment that will enhance to an optimal level, the health and well-being of our population and maintain the ecological balance of the national and the world.

Reports on the environment, population, and the health and welfare of our citizenry have been prepared by numerous Federal Executive agencies, the Congress, and Task Forces. A review of the recommendations and goals contained within these reports should be undertaken, summarized, and released to the public. On the basis of this review, action programs should be initiated.

It is the feeling of this body that the following recommendations deserve immediate consideration:

That the Council on Environmental Quality be strongly supported with adequate funds to provide a high-level group of broadly qualified resource specialists, demographers, ecologists, economists, and other social, physical and biological scientists.

That national policy for environmental improvement include the concept that known environmental hazards (e.g., radiation, noise, lead poisoning) should not be allowed to increase irrespective of whether specific adverse health effects can be presently demonstrated.

That action on problems which we know how to solve must not await further refinement of knowledge.

That a comprehensive federal program for the monitoring of the environment be initiated and assigned high priority. Such a monitoring effort must include comprehensive analysis.

Immediate Action --

That mining be conducted with minimum possible damage to the environment. Strip mining especially must be investigated and closely regulated, particularly in Appalachia (notably in Pike County, Kentucky), Colorado, Montana, North Dakota, and in all other states where strip mining threatens environmental quality. Any land strip mined must be restored as nearly as possible to its former state or better, with proper disposal of tailings and residues, and full effective replanting of all mined areas.

Finally, we feel that it is imperative that the Congress on Optimum Population and Environment begin immediately to cultivate the public trust through actions as well as words. As a first attempt to enter the action arena, we request the continuing structure of this Congress establish an investigative commission to formulate an optimum feasible national policy on surface mining. As a first step, this Commission shall investigate strip mining practices in the Cumberland mountains of the Appalachia South, and release a full report on their findings to the delegates attending this Congress, and the press.

### Section B

We recommend that the government of the United States in 1970 establish a national policy on population. This policy should develop, encourage, and implement, at the earliest possible time, the necessary policies, attitudes, social standards, and actions which will, by voluntary means, consistent with human rights and individual conscience, stabilize the population of the United States. This policy should aim to achieve an average rate of population growth not greater than zero, and thereby promote the future well-being of the citizens of this Nation. Federal and State governments should develop short and long range plans which aim to achieve desirable distribution of population and related economic activity in order to emphasize the social quality of life, prevent and minimize environmental degradation, and encourage economic growth in the less developed parts of the United States.

To implement this policy we recommend the following:

#### I. PRINCIPLE means for attaining zero population growth should

1. be effective
2. be voluntary and consistent with human rights, individual conscience and freedom of choice
3. not penalize children
4. be consistent with stability of the family
5. avoid coercion and compulsion
6. avoid raising of death rates, for example, through war, famine and disease
7. provide for political participation and social and economic justice for minority groups

#### II. ACTIONS

1. Eliminate all laws which restrict the availability of family planning information, contraception, sterilization, and abortion.
2. Maximize funding by Federal, State, and Local governments to provide for:
  - a. free family planning information and services, including contraception, abortion, and sterilization, to every American desiring such services
  - b. research in the biological, medical, contraceptive development, behavioral, and program implementation fields related to population and family planning
  - c. training manpower necessary to provide the above services and research
  - d. public information and education to communicate to all Americans the dangers of population growth
3. Establish with adequate funding a new Cabinet level Department of Population, Environment, and Resources.
4. Eliminate those laws, including tax laws, as well as government and private practices, which encourage childbearing.
5. Assign in Congress, top priority to all bills related to population which are now before it.
6. Include in all Federal, State, Regional, and Local development plans comprehensive

cost-benefit analyses, for low, medium, and high population projections.

7. Extend positive government programs to improve the status of all women and encourage satisfying roles for women that would be alternatives to motherhood.

### Section C

We urge that National and State governments give immediate priority to the problem of technology assessment.

The large number of scientists working today, combined with the large amounts of public and private funds for research and development, are generating an unprecedented rate of technological growth. This is causing a millenium of change in a few short years.

We are also concerned with the increasing ability of technology to affect large numbers of people. We recognize that certain technological advancement is both a necessary and worthy goal -- yet a misjudgement in assessing the effects of technological innovations such as nuclear power, the SST, and food additives can cause catastrophe.

Therefore, we urge increased assessment of technology by legislative and scientific advisory committees and through citizens class action suits and increased surveillance by administrative agencies.

Further, we feel it imperative that there be established an environmental authority with power to evaluate and substantially influence the employment of technological innovations.

## TOPIC V - POPULATION, ENVIRONMENT EDUCATION

The Population/Environment Education work group recognizes the following:

- I. Overpopulation and a rapidly deteriorating environment exist in America today.
  - A. One section insisted that their basis position be read unchanged as follows:  
With our present population of over 200 million, we have already passed the optimum level of population for this country.
- II. The American population must be made aware of the fact that these conditions (overpopulation and a deteriorating environment) are the primary contributors to a generally decreasing quality of life experiences for all of us.
- III. Sound population and environmental principles must be used to overcome the decreasing quality of life.
- IV. Any educational endeavor to increase the quality of life for all Americans must recognize and accommodate the socio/ethnic diversity of the American people.

Therefore, we challenge not only the professional educators but also the members of every American community. We challenge them to provide a climate for ongoing dynamic interchange of responsible ideas and projects in which environmental problems can be critically analyzed. We further challenge them to recognize the fact that this climate will not be possible unless the dangers - the very real dangers - of American racism, America's war in Southeast Asia, and American poverty are exposed in their true light and immediate measures taken to eliminate their inhibiting presence. Finally, we challenge the American community to recognize the fact that effective and lasting educational programs cannot possibly result from even an ideal climate unless a sense of sacrifice of money, time, and selfish aims is generated in all of us and in all of the institutions which we represent.

Group V urges the First National Congress on Optimum Population and Environment to adopt the following policy recommendations:

The recommendations approach the educational role at four levels - National and State, Community, Institutional, and Personal.

### NATIONAL AND STATE LEVELS

We recommend that education adequate for all citizens to guarantee a quality of life commensurate with their personal goals, needs and rights be made available. We support in principle, the Environmental Quality Education Act HR 1475 and companion bills - and their funding to establish a national commitment to population/environment education.

We urge the Congress of the U.S. to encourage and support the dissemination of existing curricular materials (in the broadest sense), the development, evaluation, and dissemination of new and improved curricular material in population and environmental materials for educational programs at preschool, elementary, secondary, college and adult educational levels.

Lack of recognition and support of environmental population problems is another area of environmental pollution. Therefore we urge that the U.S. Office of Education and all other agencies in a position to determine educational direction of this country recognize the area of optimum population and environment as the major national priority and give it appropriate support.

Each state department of education should establish an office of population and environmental education to institute, coordinate and facilitate educational programs in this area utilizing all existing relevant organizations and materials.

The National Congress on Population and Environment should establish an ongoing committee to make immediately available a program of services to educational, professional, and civic organizations, which facilitates the inclusion of population and environmental education in their activities.

All recommendations of this Congress with relevance to the educational community should be communicated to all appropriate school authorities.

Teacher certification boards should require appropriate background in population and environment for all teachers at all levels.

Interdisciplinary environmental learning centers should be created, in which students can receive up to a full year of generally transferable college credit for population and environmental studies.

Two weeks prior to the 1970 national elections should be designated for a nationwide consideration of national population and environmental priorities.

#### COMMUNITY LEVEL

Education in population and environment should not be limited to or confined in schools and colleges, but should involve adults and the total community through television, radio, the press, extension services, the arts, libraries and museums. Workshops should be held for the public in churches, businesses, fraternal and civic organizations.

The experience of this population-environment Congress must be recreated in similar Congresses formed by and for local student bodies, as a stimulus to their involvement in curriculum revision, and as the source of student delegates to the next National Population/Environment Congress.

The utilization of other institutions and facilities within the community should be an integral part of a school's population and environmental education program.

#### INSTITUTIONAL

Colleges of education have a responsibility to prepare teachers in the area of population and environmental education.

The curriculum should be enlarged to include environmental action programs.

The climate of the present educational systems of 'teacher imparting of information and answers', is also a part of pollution and should be changed. It should be changed to a climate of dynamic interchange which develops a background for the learning of the following:

- a. discovery of new problems and issues
- b. critical analysis of these issues
- c. exploration of available and ideal choices and solutions
- d. evolution of new values
- e. use of knowledge and information in developing intelligent decisions and action
- f. implementation of these actions and assuming responsibility for their consequences

Workshops should be funded to reach in-service teachers. NSF sponsored teacher institutes and other similar institutes should be requested to incorporate population and environmental education in a portion of their program.

The problem-solving approach should be prominent in teaching methods, because of the need to develop the permanent decision-making skills that are necessary for democratic solutions to population-environment problems.

Curriculum development projects in population-environment studies must be encouraged to produce materials for teachers and students.

#### PERSONAL

All of our educational solutions to the problems of overpopulation and environmental degradation necessitates a change in the basic behavior and attitudes of the American people. We encourage the American people to consider the development of new and alternative educating structures and institutions at all levels. We strongly recommend that an Earth Week be held next spring to evaluate the progress of on-going programs and to re-dedicate ourselves.

## TOPIC VI

### POPULATION/ENVIRONMENT AND THE AMERICAN ECONOMY

The target for this proposal is Business & Government.

#### I. Towards a Spaceship Economy.

Unfortunately the market mechanism as it currently functions in the American economic system does not direct the costs of pollution to other forms of environmental degradation to those primarily responsible for them. For example, the Army Corps of Engineers dredging the slime from Lake Erie at the public cost, the companies such as Wyandotte Chemical, General Motors, and Bethlehem Steel and the municipalities who generate the more than ten billion gallons per day of waste material dumped into Lake Erie do not pay the cost of even removing this waste - let alone the cost of recycling it. The clearest economic imperative is the invention of ways to assess the costs of environmental degradation and of ways to levy such costs against those who find themselves in a position where their business' short term economic gain is greater if they avoid the costs of recycling their products and of regenerating their wastes.

We propose:

1. New system of national accounting: Current economic measures of national income such as GNP conflict fundamentally with sound accounting practices and have led to environmentally disastrous fiscal and monetary policies. We propose that government develop a new system of national income accounts which include: pure air, clean water, open space, raw materials, silence, and natural beauty as a cost offset against current income.

2. Further, in order that individual businesses internalize all costs of environmental degradation for which they are responsible, we propose that a new system of taxes and regulations be enacted which enforce "life cycle costing" on all manufacturers and businesses. Ideally, the price of each product would then include the cost of recycling or disposal consistent with ecological balance. One of the essential functions of the Council of Environment should be to develop a set of environmental standards and methods for establishing scale values. In other words, difficulties exist in costing such resources as natural beauty and open space, and procedures for such costing should be developed within this agency.

3. Finally, by means of a new campaign of public information and education, individuals need to become aware of the full social and environmental costs of additional children; of the beneficial consequences of lower population size and the disastrous effects of continued population growth. We emphasize that the level of consumption of material goods is one of the main reasons that large populations are a threat to the environment. It is at least as difficult and time-consuming as it is rewarding and fulfilling to have and raise children properly. And a correct economic solution would include providing much more extensive and more meaningful alternatives within the economic system for women, including free day care centers, etc.

IMPLEMENTATION: Education, agitation of business and government, creation of an advisory council and/or task force to the fledgling council on environment to deal with the anticipated problems of costing qualitative resources and imposing appropriate taxes of legislative enforcement.

## II. Economic Justice

Target: Government

### 1. In the U.S.

Unfortunately with all the work to be done in this country to rescue its land to serve its inhabitants, there is the virtual certainty of structural unemployment during the transition of the spaceship economy. We propose that government develop a system of guaranteed annual income in order to allow expansion of our critically strapped medical, educational and cultural facilities and allow development of new roles in the American economy. It is not correct to consider a person acting to save the environment, acting to educate her or his children, of acting to clean house as a person not at work; we consider it in the national interest that our young be well cared for, and that the American economy develop new freedoms, new rewards and opportunities for all its citizens.

### 2. In the World.

Economic justice demands that we protect other countries from U.S. exploitation of manipulation of their natural resources; and further that the costing system developed to bring about the spaceship economy does not lead our polluters to move their dirty operations elsewhere.

### 3. Locally.

Economic justice demands that natural environments and communities in this society be protected from economic exploitation. We must be prepared to save the environment at the local level. For example: this Congress should go on record as strongly opposed to the strip mining of Pike Co., Kentucky.

IMPLEMENTATION: Political action, election of committed officials.

## III. Reordering National Priorities.

We believe that the transition to a spaceship economy and economic justice will require massive federal funding. We propose that a master plan for the American economy be drawn up, providing for an independent analysis of national defense requirements. We propose that programs for rebuilding the central cities of the nation, providing additional educations and recreation services, and building new forms of urban and intercity transit be evolved and funded from a fiscal dividend produced by lessened national defense spending. We suggest that technological change and increased productivity are the means by which new life styles may be evolved in which the requirements and characteristics of work are redefined, standards of consumption which are less commodity and energy-oriented are adopted, and a wider and more creative set of leisure-time activities are produced. The work and leisure-time alternatives of women should be expanded permitting as least as wide a range of choices and activities as those accorded men. We propose that the public and private services sector of the economy be greatly enlarged in order to reduce pollution-creating consumption - provide an "employer of last resort" status for the federal government, and expand the individual's access to education and medical services.

TOPIC VII

THE ARTS IN RELATION TO THE  
POPULATION/ENVIRONMENT CRISIS

THE ARTS HAVE A UNIQUE POINT OF VIEW WHICH MUST BE COMBINED WITH SCIENCE, TECHNOLOGY, SOCIAL AND ECONOMIC STRUCTURES TO HELP PEOPLE IN THE SELF-DETERMINATION OF THEIR ENVIRONMENT. WE DO NOT SEE ART AS EMBELLISHMENT. WE DO NOT THINK THAT THE ARTS SHOULD BE USED TO WHITEWASH A BRUTAL SOCIETY.

THE ARTS INTUITIVELY RECKON WITH INTER-RELATIONSHIPS. THE VIEWPOINT OF THE ARTS IS INEVITABLY THE ECOLOGICAL VIEWPOINT. THE ARTS OFFER US A NEW FRAMEWORK WHICH PERMITS US TO LOOK AT EXISTING SITUATIONS WITH A WHOLLY NEW PERCEPTION. THE ARTS CAN CREATE AN ENVIRONMENT RESPONSIVE TO THE DEEPLY FELT VALUES OF ALL HUMAN BEINGS.

WE BELIEVE THAT WHAT IS LACKING IN PRESENT ENVIRONMENTS IS A SENSE OF POTENCY, A SENSE THAT PEOPLE ARE ABLE TO DETERMINE FOR THEMSELVES -- AND IN FACT CREATE -- THE ENVIRONMENT IN WHICH THEY LIVE.

AS BENETTA WASHINGTON HAS QUESTIONED,  
"What opportunities can be provided for the constructive use of creative energies of men and women that must have outlets?"

WE THINK THE ARTS HAVE ONE ANSWER. WE BELIEVE THAT THE CREATIVE PROCESS BELONGS TO ALL MEN AND SHOULD BE DENIED TO NONE.

WE RECOMMEND THAT THIS CONGRESS ESTABLISH AN ART RESERVOIR -- A NETWORK OF ARTISTS -- REPRESENTING ALL POPULATION GROUPS AND ALL TYPES OF ARTISTIC TALENTS. THIS BOARD WOULD PROVIDE ALL GROUPS ACCESS TO ARTISTS, WHO IN TURN CAN ASSIST THESE GROUPS IN COMMUNICATING THEIR CONCERN FOR THE FUTURE AND THEIR DESIRE FOR ACTION IN THE PRESENT. ARTISTS STAND READY TO USE THEIR SPECIAL SKILLS IN HELPING COMMUNITIES TO CONTROL THE EVOLUTION OF THEIR ENVIRONMENT.

ARTS 22222222222222222222222222222222

SECONDLY WE URGE SPONSORING OF PROJECTS FOR MASS PARTICIPATION IN THE ARTS. FUNDING FOR WORKSHOPS AND INDIVIDUAL ARTISTS NOW EXPERIMENTING WITH MASS PARTICIPATION MUST BE PROVIDED. WE KNOW OF COMMUNITY TELEVISION EFFORTS, CHILDREN'S STREET ART PROGRAMS AND OTHER EFFORTS TO TAP THE CREATIVE ENERGIES IN ALL PEOPLE WHICH SET A MODEL FOR ACTIVITIES WHICH MUST BE EXPANDED.

INDIVIDUAL EFFORTS IN THE ARTS MUST ALSO BE PROMOTED. INDIGINOUS ARTISTS MUST BE ASSISTED IN EFFORTS TO DOCUMENT LIFE IN AREAS THEY KNOW BEST, IN ART FORMS MOST FAMILIAR TO THEM.

THIS CONGRESS SHOULD GO ON RECORD ENCOURAGING THE INFUSION OF THE ART AND DESIGN VIEWPOINT INTO OUR SCHOOLS AND INTO OUR MEDIA. IF THE ENVIRONMENT IS TO BE REFORMED, THEN PEOPLE MUST HAVE THE CREATIVE TOOLS TO GIVE NEW SHAPE AND NEW BEAUTY TO THE WORLD WHICH THEY INHABIT. MUSEUM FACILITIES AND OTHER CULTURAL INSTITUTIONS MUST MOVE TO ACCOMMODATE THIS VISION. THE CULTURE MUST EMERGE FROM THE PEOPLE AND THE CULTURAL CENTERS MUST BE WHERE THE PEOPLE ARE. DESIGN EDUCATION MUST BE EDUCATION FOR LIFE SYSTEMS.

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AND FINALLY WE MUST ACKNOWLEDGE THAT UNLESS THERE IS A MAJOR REALLOCATION IN PRIORITIES -- AND THIS MEANS MAKING MONEY AND MEANS AVAILABLE -- WITHOUT THIS NECESSARY STEP THE CREATIVE REGENERATION OF THE ENVIRONMENT BY THE PEOPLE WILL NEVER BE ACHIEVED.

THE VISION OF THE ARTS IS A VISION OF THE HUMAN SPIRIT FULFILLED. IT SEEMS TO US THAT THIS IS WHY WE HAVE COME TOGETHER -- TO CREATE IN FACT A VISION WHICH WE ALL SHARE, A VISION OF THE HUMAN SPIRIT FULFILLED.

## Ethical Aspects of Population/Environment Control

We are aware that all expressions of life on earth are interdependent, and together make up a marvelous and constantly changing process. Indeed, for some, even in this secular age, this life process has deep and specifically religious meaning.

We are aware, also, that each human being is of value and is entitled to abundant life and equal dignity with his or her fellow humans.

Moreover, we recognize that present human proliferation and accompanying environmental deterioration threaten both the overall interdependent life process and the value and dignity of every human being.

Therefore, in light of these things, we support an ethical life-style that includes the following positions:

1. That people have the right to procreate only within the context of their responsibilities to themselves, to children already living (both of their family and those of others), and to the overall social and biotic communities to which they belong. Responsibility to the biotic community involves no less than a stewardship that both cleanses, and maintains the integrity of the natural order.
2. That this right of procreation, so delineated, involves ready access to contraceptive information, drugs and devices to all who want them, along with the ready availability of adoption, abortion, sterilization, and fertility information, counsel and services.
3. That all major agencies and institutions within the society should redirect their concerns toward population stabilization and proper consumption, distribution and preservation patterns within the social and natural environments. In particular, we urge the churches, still the voice of moral authority for many, to think through the full meaning of their beliefs and teachings, especially the central ethic of love, in the light of the foreboding ecological indexes, and to promote what we feel will be the newly arrived at theological and ethical conclusions through their various channels of communication. Included in the latter are not only pronouncements by bodies of ecclesiastical governance, but also sermons from local pulpits and curricula and other church educational tools.

Wednesday, June 10th, 1970

Topic IX American Life Styles--Sex and Reproduction--

Policy Statement:

Given the current population and ecological crises, every American should begin immediately to exercise a life style that seriously acknowledges every individual's responsibility to limit reproduction. To achieve this every American, whether single or married should:

- begin to effectively separate sexuality from reproduction,
- have available every means of controlling unwanted births, including contraceptives, abortion and voluntary sterilization,
- be free of whatever restrictions of the past, whether legal, medical, religious or psychological that prevent this goal.

America's public morality and institutions must begin to acknowledge the ~~XXXXX~~ the achievement of sexual freedom and varieties of life styles that are not only increasingly present in our society, but a major means to responsible population control.

Recommendations:

1. Birth Control: Repeal all anti-birth control legislation including anti-abortion laws. Remove all ~~XXXXXXXXXXXX~~ restrictive regulations not required by considerations of health. Include birth control information as part of the ~~XXXXXXXXXX~~ human sexual education curricula of all school systems.
2. Sex Roles: In order to achieve optimum population size and full individual human potential, all distinctions based on sex must be eliminated from American society immediately. In order to begin removing barriers to the achievement of these goals, Congress must pass the Equal Rights Amendment to the U.S. Constitution which would prohibit ~~the~~ legal discrimination based on sex.
3. Alternative Life Styles: In order that individuals have the ~~the~~ freedom to participate in any alternative life style without social, economic or legal barriers (other than protection of individuals against infringement on their rights by others), we must promote options to the 'ideal American Way of Life'. We urge that this be done through education, governmental change, the mass media, research, religious and other organizations, and ~~a~~ personal example. We also

homes for all children by eliminating restrictions based on sex, race, religion, or marital status. We recommend that financial subsidies be provided where needed.

We encourage the development of a variety of alternative life styles--both spontaneous and planned. What follows is one example of planned, systematic ~~xxx~~ research on alternative life styles:

Resources should be made available for pilot experimental programs to explore new social programs which would provide alternative roles for women and men. Such programs would permit the redefinition of the parental functions, sharing of the child-rearing tasks, the development of community child-care facilities, and the development of the full economic potential of women and men.

Evaluation of these experimental programs would seek to determine the happiness and growth of the participants, the viability of such ~~xxxxxxx~~ programs, and the effect on fertility that such innovations would have. Information gained from such programs would be disseminated to groups around the country interested in ~~xxxx~~ developing similar social models.

4. Education: Given the need for public education on population control, a major research program should be initiated to determine the most ~~xxxxxxx~~ effective methods of changing attitudes regarding the number of children desired. As an integral part of such a program a national clearing-house should be established for the collection and dissemination of successful educational approaches.

Such research should go beyond the examination of current life styles to include methods of increasing public awareness of the material and ecological standard of living that will be inherited by our grandchildren.

## MEDICAL CAUCUS

Since medical science has made sexual expression possible without fear of unwanted childbirth and all its negative effects, and since overpopulation is a major threat to health, we urge the health professionals to provide free and easy access to voluntary birth control, including sterilization and abortion and other services related to sexual expression, as a right to all, regardless of age, sex, marital or socio-economic status.

To implement this, we urge the health professionals:

### I. Education:

- A. To include in-depth study of sexual behavior and the reproductive control as an integral part of all health professional curricula.
- B. To actively support education on human sexuality in all schools (public and private) that offers information regarding birth control, including sterilization and abortion, and excludes indoctrination regarding specific "sex roles." To create facilities for such education where local schools fail to do so.
- C. To promote the use of mass media for the distribution of scientifically accurate information regarding sexual behavior and control of reproduction.

### II. Services

- A. To recruit health professionals to participate in a national voluntary population control program.
- B. To develop special training programs for health professionals in birth control techniques, including abortion and sterilization, and other aspects of health care related to human sexuality.
- C. To give medical sanction to abortion on an outpatient basis.
- D. To establish birth control, including sterilization and abortion, as essential health services within the public and private health care program.

TOPIC X - POLITICAL AND COMMUNITY ACTION

Preamble (to the First National Congress)

We are dedicated to the creation of new life styles consistent with the delicate balance of nature. We are unified in working together for an ultimately sound ecosystem that must be implemented on all levels now.

Our commitment begins with a sense of disquietude and ends with action that will create and maintain the highest possible quality of life.

We recognize that all life is sacred, yet at present all life is threatened with ecological destruction. People are unhappy with the unfulfilled lives they lead. We believe that free, fulfilled individuals will accept their communal responsibility to all forms of life.

Since an ecological life style with its concomitant social values does not exist in the U.S., we shall develop and implement policies consistent with attaining social values which can bring about the cultural evolution necessary for such a truly sound ecosystem.

Governments and corporations as well as people shall no longer act without regard for others. Legislation can no longer tell us what to do with our bodies. We are dedicated to the necessity to educate all to the needs of each person as he related to his environment.

Further, we must re-evaluate not only the power in the U.S., but also the basic needs of people consistent with a healthy ecological perspective. We recognize that the population and environmental crises are one. We want the opportunity to develop cultures consistent with a stable population. We must be reasonable and demand the seemingly impossible! These times are too dangerous to stop short of the utopian.

National Section of Group X Statement

To achieve an ecological and population balance there must be a reordering of national and international priorities. This requires supporting mechanisms, human and financial resources sufficient to this end. Inherent in such an achievement is a moral and legal commitment to a bill of individual rights and responsibilities.

Among these rights and responsibilities are:

- I. Participation in decision making effecting the quality of life and the development of a peaceful and humane society.
- II. Life in a healthful environment including adequate health care, adequate nutrition, clean air and water, freely available voluntary contraception, abortion, and sterilization services, adequate housing, access to and use of open lands and recreational space.
- III. Comprehensive education to enable the individual to prepare for and to pursue a meaningful role in society.

Among the implementation measures that we feel as urgent we see the following as primary in importance.

We must immediately end the war in Southeast Asia, the arms race, the space race, and the preoccupation with increasing national economic growth, so that we can redirect our national energy to problems of the population and the environment. To that end, we should educate and involve the American people at the grass-roots about the need for a life style of material restraint and the urgency of the population-environment crisis and the intrinsically related crises of poverty, racism, and urban life. We

contend that it will be impossible to solve these problems as long as we spend the major part of the Federal budget on defense and on such negative priorities as the SST, MIRV, ABM, and the trans-Alaskan Pipe Line System. Revision of priorities will require that our nation provide employment reallocation and aid for social and economic readjustment to those Americans who might otherwise be victimized by a reduction of defense and aerospace industries and of other affected enterprises.

#### COMMUNITY ACTION RELATED TO THE CORPORATE POWER STRUCTURE

Whereas we need a drastic reordering of life styles.

Whereas we need to reorder our economic priorities and our consumption of world resources away from the military, industrial complex and toward an equilibrium service-based economy.

Whereas institutions (both governmental and private) need to be more responsive to the lives of the people they effect.

We challenge all policies and concepts devoted to growth for growth's sake.

Realizing the inter-relationship of all the problems, we must work towards a total, ecological view by breaking down the barriers between disciplines that prevent man from seeing the true nature and scope of his predicament.

We must,

1. Identify and expose and then utilize the submerged power wielders in our society.
2. Challenge the premise that individuals can hide behind the anonymity of the corporate facade.
3. Challenge the dominance of the communications media by profit motivated corporate advertising and the preoccupation of the commercial mass media to serve the corporate interest.
4. Expose regulatory agencies that are the tools of the very industries they supposedly police and demand that they discharge their true responsibilities to the citizen.
5. We call for action to enlarge the definition of corporate responsibility to society by 1, legal means, 2. consumer/citizens pressure, 3. new legislation.
6. We oppose corporate feudalism in the exploitation of all natural resources. Such as farm lands, minerals.
7. We urge the vigorous enforcement of existing anti-trust legislation and new laws to prevent further vertical and horizontal agglomeration.
8. Reform of tax laws that promote corporate activities that are inconsistent and incompatible with social values.
9. We urge the large scale use of new generation computer information technology to effect true multi-disciplinary planning in helping solve our societal/ecological crisis.
10. We urge the humanist use and democratism of computer technology.

The First National Congress on Optimum Population and Environment perceives that the need for the following programs related to the environmental issues of peace, poverty, pollution and population is of critical - and, perhaps, of pivotal importance - and that, for each, federal, state and private funding must immediately be forthcoming.

1. The development of new and improved environmental educational curricula for use at all levels of instruction, including innovative and experimental local programs for adult education and continuing education for public officials and administrators, as well as civic, business and professional groups.
2. The development of new and improved communications materials and techniques for the promotion of environmental understanding and awareness among all the public through the mass media, particularly television, and

3. The funding of non-profit community organizations undertaking projects, experimental as well as conventional, to promote on the local level understanding and awareness of the aforesaid environmental issues.

These programs must be afforded adequate funding immediately and continuously by governmental appropriations and private assistance. It is imperative that token funding be avoided; these programs must receive whatever funding is needed in order to assure their effectiveness and to avoid false economics in financial allocations.

It is absolutely necessary that once having made the determination to fund these programs, governmental agencies and private contributors divest themselves of the purse-strings power and strictures which can and do strangle efforts to develop the creative and innovative programs we need.

#### Implementation

In support of the aforesaid resolution, we endorse the bills currently pending in both houses of the Federal Congress (S 3151 and HR 14753) as the Environmental Quality Education Act, and we urge the passage of said act during the current session of Congress.

We further urge that each state without undue delay adopt and generously fund similar legislation to effectuate the objectives set forth in this resolution.

## Topic XI: Technological Aspects of Population/Environment

We recognize that in many instances application of science and technology in ignorance or disregard of the ecological and social consequences has seriously degraded or threatened the environment.

Moreover, overemphasis on economic growth has contributed greatly to environmental deterioration.

However, we believe that a sane and humanized technology is vital for the solution of serious social problems and to minimize further damage to the environment.

We therefore propose that American technology and applied science be redirected away from continued increases in consumption of goods and resources and toward the following goals:

1. Prompt termination of population growth.
2. Improvement of environmental quality.
3. Achievement of a society in harmony with the life-systems of the earth.
4. Redistribution of the benefits of technology equitably to all people.

To implement this resolution we make the following general recommendations:

That immediate action be taken to develop methods which insure maximum possible recycling and reuse of resources including water, metals, minerals, paper, glass and plastics, and industrial and domestic wastes.

That ecological consequences of new technological processes and products must be evaluated and made public before they are introduced.

That additional environment environmental protection offices be established throughout the country to monitor and report on environmental quality, and to represent the environmental needs of the people.

That the federal government proceed immediately toward international cooperation in the monitoring and protection of our common world environment.

That a national laboratory for environmental and population research, and a system of regional environmental laboratories be established with sustained federal support.

That a continuing study of power production methods be carried out to evaluate environmental hazards of alternating methods of power generation and to develop new methods of power production, fully recognizing that there are physical limits on the amount of power which can be generated on earth consistent with the continuation of life.

TOPIC XI

That agricultural technology and research should be directed toward practices which conserve resources, protect the environment and lead to improved quality of human nutrition.

That knowledge and technological resources be directed toward meeting the needs of all sectors of society, including provision for adequate housing, nourishment, education, and attractive and diverse living environments.

(The following represent the views of only one of the two study sections.)

In support of these general proposals we recommend the following specific actions:

That a timetable be established to decrease pollution levels from automobiles and that immediate priority be given to replacing internal combustion engines with nonpolluting engines. <sup>Preferably</sup>

That the development and establishment of a viable mass transit system be given top priority and continued support.

That development of the SST be stopped immediately and that the government ban any SST from U.S. airports.

That production and use of all persistent pesticides be phased out as soon as possible.

That extraction of oil from the Alaskan North Slope and from the continental shelf be stopped, until absolute safeguards can be developed to protect the environment from oil spillage.

That the U.S. government refuse to allow inadequately protected super-tankers to be registered in this country or operate in national waters.

That top priority be given to development of adequate solid waste disposal systems.

That the devastations of uncontrolled strip mining be halted.

(Note that the eight specific recommendations above represent the views of only one of the two study sections.)

## TOPIC XII

### INFORMATION AND PUBLIC OPINION

Public opinion in a democracy must be changed before action is possible. We have a good case, but it must be gotten out to the people before it can be fully implemented.

We must also recognize that the process of changing public opinion must go hand-in-hand with the action which changes our society. To have knowledge of our environment we must participate in changing it.

To help transmit this information to the public and appropriate agencies, we make these recommendations to the Congress:

I. We should make available for public use the communications technology for the public that is now available to institutions such as educational, media, industrial and governmental agencies.

A high priority should be the use of a currently working computer information system which will provide for participation by a network of users whose special interests, activities and skills can contribute to the solution of population and environmental problems.

The service should be flexible and independent of the special interests of any one group.

We recommend that COPE investigate the potential of such enterprises and support and participate in an appropriate and promising system.

II. An environmental news service could be established as a COPE project. This would be a mailing service of news releases provided free to the nation's press. The releases would be written in news style. No such news service exists at present.

The newsletter would be issued by a COPE public information office which would have other functions, including operating a speakers bureau, coordinating environmental research programs, and calling attention in advance to radio and TV programs that will help form public opinion favorable to an improved environment.

III. A committee of COPE, comprising media experts and other professionals, could be established to:

A. Coordinate and assist efforts already in progress, to influence public opinion on population and environment. Such efforts include:

1. For our children -- A Better America campaign
2. Information-gathering organizations such as Environmental Information Service (EIS).

3. Public Broadcasting environmental centers.
4. TV film productions produced by such groups as Planned Parenthood, universities, ecology center, etc.
5. Population and Environmental publications.

IV. Monitoring squads on national, regional and local levels should be established to call public attention to advertising and other public statements that are environmentally misleading. Prominent and competent persons should be called on to identify the source and point out the mischief. They could be facilitated by COPE nationally and by ecology centers locally.

V. We urge that delegates return to their communities and help set up ecology centers where they do not exist and to participate in them where they already have been established. These centers should be used to collect and disseminate information on all major environmental-population problems. Such centers would through constant initiative, act to keep the community and all its media alerted, interested and informed on these issues.

VI. Ecology centers and other local groups should get the media directly involved not only in reporting the environmental crisis, but in helping to solve it. An example is the participation of newspapers in newsprint recycling, both by turning their own product back for reuse and by using recycled paper.

VII. An important factor in getting the message to the people is competent environmental reporting. We suggest that environmental specialists consider careers in all media of journalism.

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POSITION STATEMENT

PRESENTED BY THE BLACK CAUCUS--

FIRST NATIONAL CONGRESS ON OPTIMUM POPULATION AND ENVIRONMENT

JUNE 7-11, 1970

Members of the Black community in attendance at this conference have met and carefully considered the major problems being discussed and the proposed solutions. It is an established fact that life and life support perspectives as seen by Blacks and whites are seldom concomitant. The philosophical concepts and the established priorities of this Congress demonstrate the failure to include, during the planning stages, significant Black input which reflects the interests of Black people. It must be understood that there can be no integrity for or credibility in any group which possesses solutions that would affect all but are conceived by some. A revealing commentary is that this Black Caucus had to be conceived and convened on an ad hoc basis. Additionally, any retrospective attempts to legitimize a discussion of racism two days into the Congress is a conciliatory gesture and an intellectual insult to Black people.

We call for the immediate reconstitution of this body to reflect on all levels the need for input from the non-white community. A common ground must be established if we are to deal with the total problem of human ecology. It is irresponsible to use hypothetical future generations as a means to escape the consequences of our failure to reorient the present-day priorities which are inconsistent and detrimental to the interests and needs of Black people. The appeal of a new cause can not be allowed to distract us from the unpleasant realities of today.

We submit to you the following considerations:

1. the present deliberations on the population and the environment can not be based on the assumption of a common national life style.

2. if individual productivity is to be replaced, what are the projected alternatives for determining access to necessary life requirements such as food, shelter, etc.
3. birth control is no solution for the present day problems of the living, vis-a-vis comprehensive health care.
4. the present system of disproportionate allocation of resources is unrealistic and incompatible with the immediate priorities of the Black community.
5. the elimination of dangerous species such as rats, roaches and other vermin is of more immediate concern to the Black people than the preservation of brook trout, buffalo, and bald eagles.
6. Black peoples' lives are already being destroyed through exploitation, overcrowding, disease, starvation, and drugs.

It is imperative that this Congress works with us for the preservation of all mankind, with the assurance of the following:

1. a guaranteed minimum income which recognizes the national variations in the cost of living index.
2. comprehensive health services, access to which is obtained through a guaranteed income and national health insurance in conjunction with a competent, responsive, public delivery system.
3. adequate nutrition, access to which is obtained through a guaranteed income and a competent, responsive public delivery system.
4. comprehensive education, access to which is obtained through a guaranteed income and a competent, responsive public delivery system, readily available in a form consistent with the individual's level of understanding.
5. that no coercive family planning or population stabilization measures are allowed to become a part of a national or local legislative policy, but that voluntary measures, emphasizing an individual's freedom of choice be implemented.

In summary, it is necessary to reiterate that the Congress planners have demonstrated the typical profound, and oftentimes callous lack of concern about those issues that are of primary importance to basic Black survival. The doctrine of self-determination as expounded at this conference appears to reflect a dogma of chauvinistic arrogance which provides a vehicle of change without concern for all human dignity.

Symbolization of the anxieties through concern about air, water and land, and projection of fears over one's own annihilation onto an "unwanted population" is akin to an Homeric tale perpetuated by his "silent majority" recently resurrected after being puked up from the bowels of the earth.

We are engaged at this conference in a "Tragedy of Commons" where "common people" who profess at the conscious level a dedication to programming constructive change, actually, sub-consciously, engaging in the programming of change. Black and white, rich and poor, should not be deluded into believing that any member of any caste or class in the country is so obtuse as to be tossed, Herclean-like, back into a system from which he is only now escaping.

The Black Caucus recognizes the transactional aspects of these intellectual games in Black and white at this Congress. It calls attention to the pernicious and dire consequences of the adoption of any philosophy that would result in psychological or physiological oppression of individual freedom.