

viii Preface - Began 1961 w/ Nuclear War - Now "world focus" a similar threat to human health and survival from changes in the global environment, oz, hab, spe., warming, pollution of air water soil

Degradation more difficult than nukes - by orders of magnitude
Believe - people will be motivated to make the changes in their lives

X - pop growth at the center. POP. Act will fail exponential growth

xi - moral courage? Vice President Gore?

xi - There is still time left...

2 - We are altering the basic physiology of the planet

4 Rate of Industrialization (much faster than pop.) is a more (than pop.) imp't determinant 1950-85 - Electricity, Manufacture, Cars, Chemicals

3 - The "Human Belief Systems" prevent us from realizing the dimensions of the environmental crisis.

4) Solutions - 3 Steps

Sulphur Dioxide SO_2 - Bronchoconstrictor - Asthmatics
Particulates - Can Control Next days Mortality Rate?

21 Emission Controls - Cars, Working.

32 - 1/2 of US - most of world use groundwater - wells, rivers

45 - on Chlorine in drinking water

50 3/4 of toxic waste disposed sites that don't comply with regs are in impoverished areas - of color.

55 - Export Death Garbage Materials Prop. Pesticides - we export those we have banned because of danger.

60 - Lead - No threshold to leads harmful effect on intelligence

73 - 100,000 Deaths per year from occupational illness - 50,000 - 70,000

74-75 - Top 10 - Employment Related Disease or Injury

95 - Radiation - Follow Headings & Summaries

110 - Atmospheric Testing - Calc. 430,000 fatalities
Has Set upon other 700,000 Deaths in Future

131 - Data on Multiplying Burdens of the earth - Pop.
Rain Forest 55% gone - going at 1.8% per year
Species Extinction - 1/4 species in 50 yrs.

142 Danger of Phytoplankton Disaster with UV Radiation

148 Immune System Damage - more vulnerable to Infection
Critical Condition

143 - Contrasting Effects of Ozone at 2 levels

Testing it where we need it - gaining where it poisons

149 - Tropospheric Ozone - may compromise food supply

163 - Climate change - per C° of warming - Agricultural boundaries move 200 to 300 K

164 TRIVIA Saskatchewan Produces 11% of the Entire Trade Wheat?

Macrofood trend over last 30 years

172 Population $\odot$ Crest over crew - "Without Pop"

Control general health will remain elusive

173 - Basis of Pop control A Family Planning $\odot$ Infant mortality Reduction

174-175 - Pop Growth Graphs

2.04% rate Between 1965-70 - when New Age Began
(Realization of New Age) - Counter culture - Tie mini Atomic Quote

177 - it is our Renewable Resources - water, fish, soil that, in our numbers

178 - Globally - annually - 140 m. births - only 50m die
we are exhausting

179 - Desertification & the Beyond Beef Campaign

50% reduce beef consumption.

180 - Adolescents pregnant 15-19 95 per 1000 in US

$\odot$ Effect of Honesty & Truth $\odot$ 15 " - in Netherlands

181 Citrus - 1900 - 13% - citrus - 2000 - 1/2 in citrus

182 - 4 conditions necessary for pop to stabilize 1) Farm Plan 2) Low

Infant mort 3) Adult Literacy - 4) Better Status of Woman

183 - a Pop. Test - worked - In Kerala - (India) Lowered Pop to

Nearly 2 PG in a still very poor area.

183 - Literacy is the ^{best} correlate of birth rate

185 - US puts Abortion Politics into Family Planning World Funding

185 - Russian Abortion Russia - 112 to 1000, Netherlands - 5%

186 - "A male dominated society

USA - our foreign Aid totals - 21 of GDP - 5% of which is for pop.

187 - Incentives (Policy) for Population Control

187 Humans have a biological inability to Perceive
⊛ ? Small changes in their environment.

195 - Species Loss ⊛ GREAT ⊛ $\frac{1}{4}$ in 50 yrs / Lowest #
since End of Dinosaurs, 1000% of times natural rate.

197 - our DNA 1% different from a Chimp.

212 Bats & Birds - going fast - Eat Insects

212 - Ocean Fishing - Problems ⊛ Good

216 - Change in Environment - allow diseases to
like A105 emerge when natural host is damaged
"new" E MERGE

217 ⊛ Hypothetical Disaster Scenarios