

ESSAY 2 HUMAN IMPACT ON THE ENVIRONMENT: THE CASE OF OCEANS AND WETLANDS

out: late Friday, 5 September 2008

back: Thursday 11 September 2008

length: no more than 3 pages (1.5 line spacing, Times New Roman 11 point, or equivalent).

The books of Kunzig and McKibben in many places raise the question about changes in the environment caused by human activity. Much of this change is inadvertent, done out of ignorance. Other changes are done in full knowledge of their effects. Still other changes are made or planned to be made intentionally, perhaps to repair the perceived damage.

Using examples of each kind drawn from the reading, lectures, the UW wetlands and our labs, write an essay describing where you think human-caused environmental change of oceans and wetlands is headed in the future,

particularly those aspects which you had not known about (or known little about) before August 25. Use specific, detailed examples to make your point, rather than unspecific general feelings. For example, the UW wetland is itself a very complex product of specific human actions, past and present, and its future depends critically on human decisions. Global warming is clearly one of the critical examples, but one must go beyond the simple fact of it, and into its detailed impacts, to make progress. You can add some research to the sources we have discussed, but be sure to fully cite the sources of any ideas or direct quotations that you use.

Here is a related idea. A deep question that you could begin to consider is this: we have long believed that it is human intelligence that has made us the dominant species on Earth. Yet, obviously this same intelligence may be leading us into difficulty. We might ask, as the evolutionary biologist Ernst Mayr did, whether it is 'better for a species to be smart than stupid', for it to survive long. He estimated that some 50 billion species have existed on Earth since the origin of life, and only one "achieved the kind of intelligence needed to establish a civilization." "It did so very recently and it is assumed that only one small breeding group survived, of which we are all descendents." Judging by biological success, beetles and bacteria are vastly more successful than humans in terms of survival. In our present form we are not much more than 100,000 years old, and civilization not much more than 12,000 years old, just a blink of the eye in the history of the biosphere. Mayr was making this argument to explain why the search for extraterrestrial intelligence (through projects like SETI) has so far failed. Slime molds don't seem to ruin their home environments the way we do. This idea is shocking to one who believes that science gives us the understanding to improve human life, and with it the life of the biosphere.

At the end of this course we will encounter some much-needed good medicine, in the form of 'can-do' optimism about human prospects. These have largely to do with redesigning industries and life-styles so as to harmonize with the biosphere.

