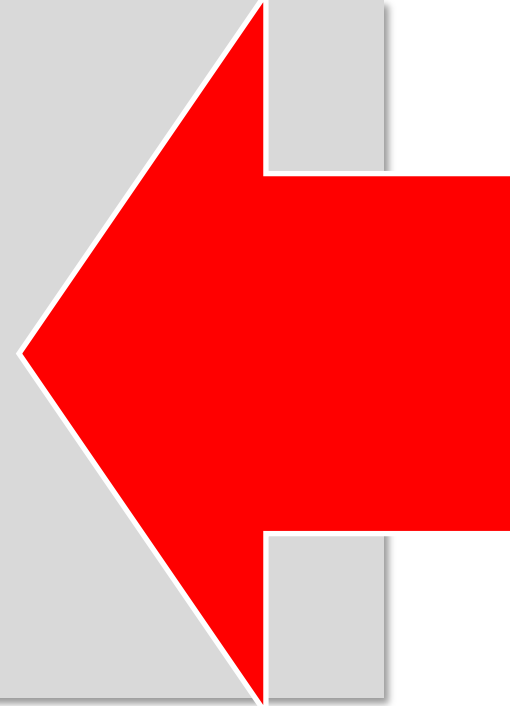


**NOTE!**

**Assignment 12 has 2 questions, but it counts for 10 points in my final grade calculations. Submitting Assignment 12 will earn 10 points if it is complete and on time!**

**Note: This activity will take some time to do. You will need to carefully read the article “The Scourge of Cows” and then, to the best of your ability, figure out where the passages of text fit into the Environmental Analysis chart.**

**You must submit your answers to the questions in Assignment 12 in Blackboard.**



## ASSIGNMENT 12: Environmental Systems Analysis

# “The Scourge of Cows”

### Human Driving Force

1. Population
2. Affluence
3. Technology
4. Political & Economic Systems
5. Culture

### Human Activities

- 1a. Hunting & Fishing
- 1b. Livestock
- 1c. Farming
- 1d. Forestry
- 1e. Mining
2. Industry
3. Services
4. Household Consumption
5. Transportation

### Environmental Change

1. Energy / Material Redistribution
2. Pollution
3. Direct Biological Interference

### Adverse Consequences

1. Adverse Human Consequences
2. Adverse Natural Consequences

### Solutions

1. Prevention
2. Technological Change
3. Natural Feedbacks
4. Relocation & Land Use Change
5. Mitigation
6. Compensation

You will need the following to complete this assignment:

- 1) open the file “Assignment 12 Flowchart”
- 2) open the file “The Scourge of Cows”

I recommend that you print out the flowchart so that you can have it in front of you as you read through the article.

- 3) submit your answers in Blackboard.

# The Scourge of Cows

by James J. Parsons

Copied with permission from *Whole Earth Review* (Spring 1988), pp. 40-47.

James J. Parsons was Professor of Geography at the University of California at Berkeley. His work centered on the cultural geography and environmental history of tropical America, Spain and its Atlantic islands, and the western United States.

MY INTEREST IN livestock in Third World development was initially spurred less by any concern for Third World economic development as such (and I here direct my attention primarily towards the tropical parts of Latin America) than by an interest in landscapes and landscape change-especially vegetation change resulting from human activity. The advance of pasture (grassland) at the expense of lowland rain forest and dry tropical forest in the Americas first attracted my attention some 35 years ago on the Caribbean coast of Colombia inland from Cartagena in the Magdalena and Sinu river valleys. Not long after, during a visit to Costa Rica, my attention focused on the Pan-American Highway, which was pushing southward toward the Panama border, opening up the richly forested Valle General and the Pacific lowlands of that country to pioneer settlement. The process was just beginning to be dominated by cattlemen. The destruction of Amazonia was to come later.

As a geographer I was interested in the fact that most of these newly forming potreros (pastures) were composed not of native American species but of grasses of African origin. They were palatable to cattle and they were aggressive colonizers. They were here to stay. Several of them, like pangola and kikuyu, had only recently been introduced to the New World tropics. A couple of them dated back to the 18th century, having moved gradually from points of introduction in Brazil or the West

As you read through the article, you will come across highlighted passages. Consider those passages carefully... where does each fit in the flowchart: "Human Driving Force," "Human Activities," "Environmental Change," "Adverse Consequences," or "'Solutions..." ...?

Make a note of that on your flowchart (if you printed it out) or in your notes.

→ The blank flowchart is available on my website.

As an example, shown here is the first passage. This describes the conversion of tropical forest into pasturelands This is an Environmental Change: Direct Biological Interference (cutting down of the native vegetation and replacing it with pasture grasses). This passage does not fit any of the other major headings (those across the top).

In Blackboard, Question 1 is:

"The advance of pasture (grassland) at the expense of lowland rain forest and dry tropical forest..." best describes \_\_\_\_\_ under \_\_\_\_\_.

→ This passage describes a type of environmental change. The forest is being cut down in order to create pasture for cows... thus, the forest is being placed by grasses. This is direct biological interference.

→ The answer is: Direct Biological Interference under Environmental Change

Read the entire article and make note of where each highlighted passage fits into the Environmental Analysis flowchart.

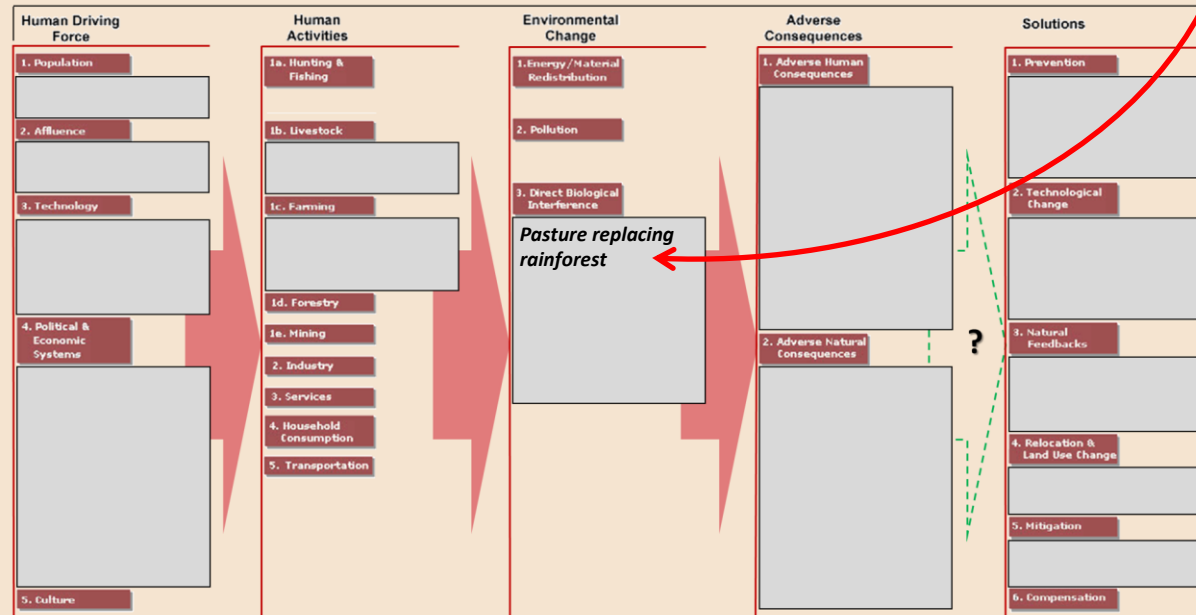
Now for the tricky part: In Blackboard, answer all the questions. This will be easier if you print out the flowchart so you can have it handy to refer to.

Each question refers to a passage in the article. Answer each question.

Please note that there are more than 10 questions, but the assignment will be scored for 10 points in the grade calculation (unless you don't do it).

This assignment takes a while to do, and you do not need to try to do it all at once

Also note: the boxes in the flowchart will give you some guidance. Any subheading that does not have a gray box underneath it will not be used in this flowchart analysis focusing on the problem of raising cattle in tropical lands.



Environmental Systems Analysis Flowchart: The Scourge of Cows (Parsons, 1988)