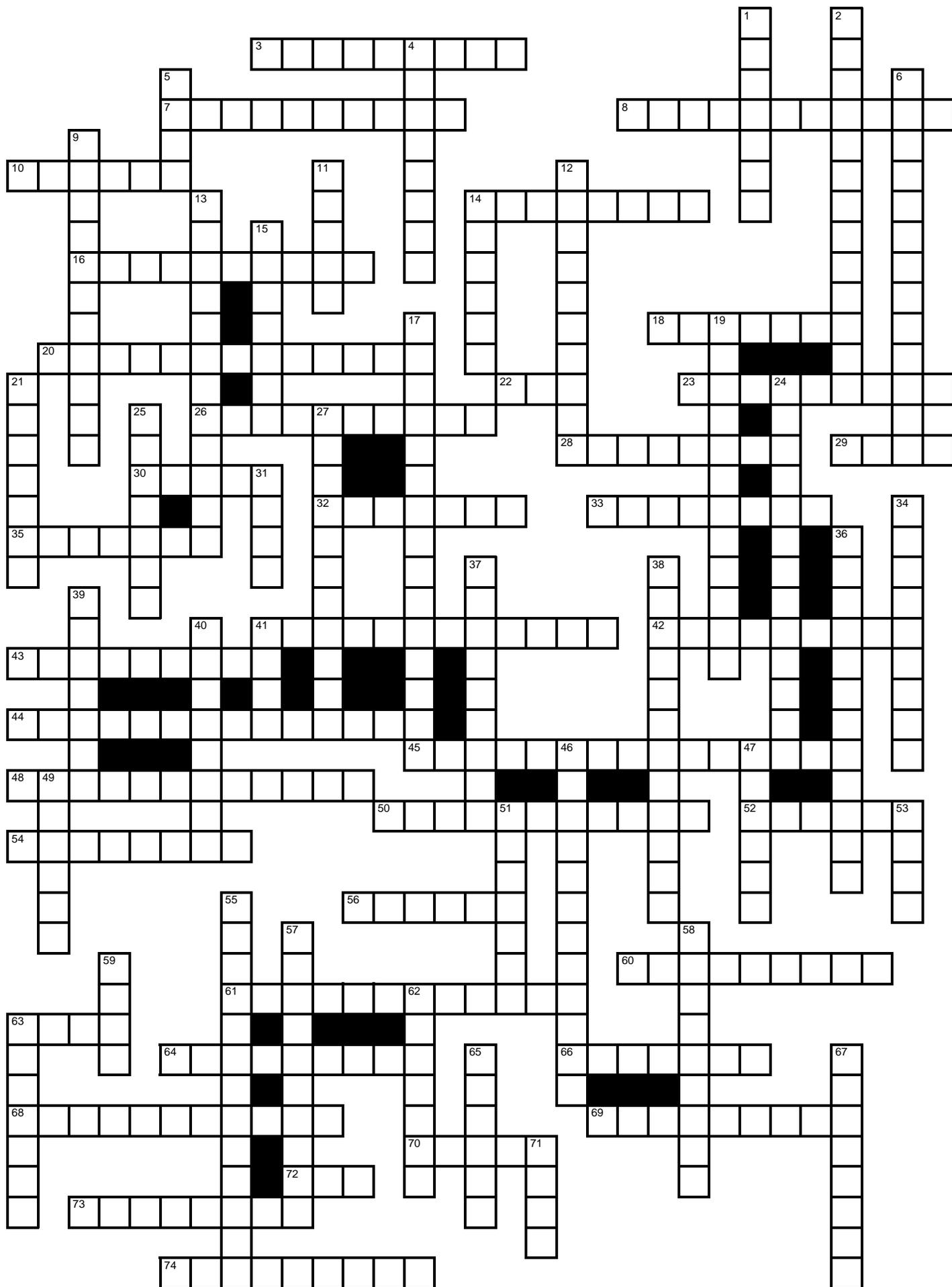


chapters 3,4,5,6



Across

3. Super -?- are know for their ability to MODEL and solve complex problems while predicting the future.
7. Loss of habitat is the number one cause of species -?-.
8. -?- populations growth is never sustainable.
10. figure 5-7, were there more mooses or wolves in 1980?
14. According to DATA ANALYZING in ch-5, the carrying capacity of the -?- population is around 320 individuals.
16. Human activities such as modern agriculture, hunting, and the -?- revolution have had a great impact on the Earth's landscape.
18. Loss of -?- is a limiting factor that is independent of density.
20. What chemical comes from industry smoke stacks (burning coal) and contributes to the problem of acid rain? ch-6
22. 30 years ago the over use of -?- had created a hole in the ozone layer that blocks harmful radiation.
23. What is the next level (bigger and more complex) of organization above population?
26. Organisms that make their own COM are called -?-.
28. The biological productions of an ecosystem often depends on the availability of one nutrient known as the -?- factor.
29. Most of the resources on the Earth can be classified as renewable or nonrenewable based on how -?- we use them.
30. No two species can occupy the same -?- at the same time.
32. The biomass in a -?- goes down by 90% for every level you go up.
33. figure 3-14 what organism removes nitrogen from the air?
35. In the early days of Yellowstone the caretakers did not understand the complex interactions between -?-.
41. Organisms that collect COM from their environment are -?-.
42. Type of symbiosis where both organisms are benefitted?
43. What is the next level (bigger and more complex) of organization above biome?
44. figure 3-13, what is one process that removes carbon dioxide from the atmosphere?
45. What biome is always warm and has the most rainfall in May?
48. What is the flat bottom of the deep ocean called?
50. A high birth rate and low death rate is not -?-.
52. Ants and -?- often have a mutualistic relationship.
54. The relative closeness of a location to the equator is known as the -?-, and has a great influence on the climate of that area.
56. The water, carbon, and nitrogen cycles show us how -?- changes from a used state to a usable state.
60. The removal of elk -?- from Yellowstone eventually resulted in a crash in the elk population.
61. What biome has the greatest variation of temperature in a year?
63. The age-structure demographic diagram of a population with high birt rate and high death rate will look like a -?-.
64. What type of energy sources will never run out?
66. What does of "O" in COM stand for?
68. Government -?- try to reduce the impact of human activities on the Earth to a sustainable level.
69. What is the next level (bigger) of organization above atoms?
70. figure 4-3, what direction do the water currents flow off the West coast of South America?
72. In Japan they have a low death rate and a -?- birth rate, and thus a stable population size.
73. The first step in dealing with global climate change is to accurately -?- what is happening.
74. -?- occurs when one organism catches and eats another.

Down

1. During ecological succession, a -?- species is the first to appear.
2. What are the primary producers of COM in aquatic ecosystems?
4. figure 3-7 (and the 10x rule) it would take 300 -?- pounds of algae to sustain a 30 pound shark?
5. Food -?- are often used to illustrate who eats what because food chains are often not linear.
6. Both photosynthesis and chemosynthesis produce -?-.
9. The maximum sustainable population of the Earth (at least for now) has been greatly increased by the use of -?-.
11. What does a GIANT SNAIL eat?
12. What type of pest control is sustainable? figure 6-8
13. What causes ecosystems to be constantly changing? figure 4-9
14. figure 3-8, what eats zooplankton?
15. The third step in dealing with global climate change is to accurately -?- how things will be changing.
17. What type of biome does Germany have?
19. -?- is never considered a renewable resource because once a species goes extinct it can never be replaced.
21. What density dependent factor apparently was limiting human population growth between 1000-1500 A.D. figure 5-10
24. In the process of biological -?- DDT became concentrated enough in eagles to lower the birth rate. figure 6-16
25. The population -?- tells us how close together the individuals are.
27. A climate chart shows the -?- and the rainfall for each month.
31. What law was passed in 1966, that made it illegal to do harm species of animals that had a low and decreasing population.
34. In the presence of -?- resources, a population can grow exponentially.
36. The ecosystem provides us the service of -?- of water. figure 6-22
37. figure 4-2, at higher latitudes solar energy is more -?-.
38. -?- occurs when two organism live closely together, one is benefitted and the other is unaffected.
39. The study of how organisms interact with their environments.
40. Atoms are -?- by living systems like our biosphere.
41. The climate of an area is affected by how the -?- on the earth is transported by winds and water currents.
46. Zoos, national parks/wilderness, government regulations are all parts of man's attempt at the -?- of species.
47. What state was most affected by the Exxon Valdez oil spill?
49. -?- presentation of facts can mislead people, without lying.
51. The climate is a description of the -?- condition over many years.
53. 97% of the water on the earth is -?- water.
55. The amount of -?- in the air affects the climate of the earth.
57. What pink flower helps to treat cancer? figure 6-14
58. figure 5-5, in this diagram there are more density -?- factors limiting population growth.
59. One man with a tractor and -?- can do the same work of 500 men 500 years ago.
62. figure 4-5, The different species of birds in a spruce tree occupy different niches because their -?- heights are different.
63. The weather is a description of the -?- conditions in an area.
65. -?- flows through living systems like our biosphere.
67. By EXPLORING ECOLOGY FROM SPACE we see a -?- pattern of rain forest clearing in Brazil.
71. In Africa they often have a high birth rate and a -?- death rate, and thus a stable population size.