The estimated changes in *net productivity* (grams of organic mass produced per square meter per year [g/m^2/yr]) and *biomass* (kilograms of organic material per square meter [kg/m^2]) of plants on abandoned farmland in New York appear in Figures 1 and 2, respectively. Successional time is divided into 3 stages based on the dominant plants.

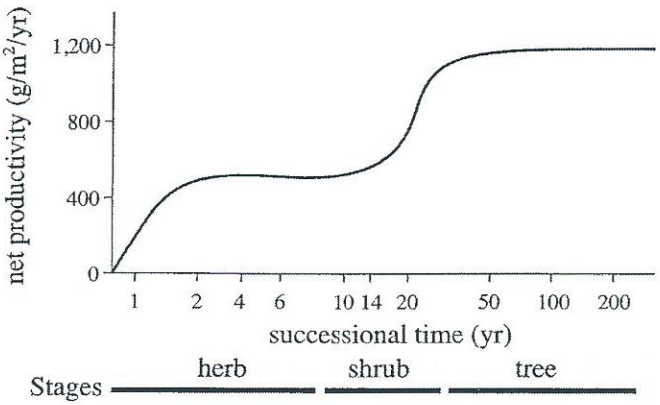

Figure 1

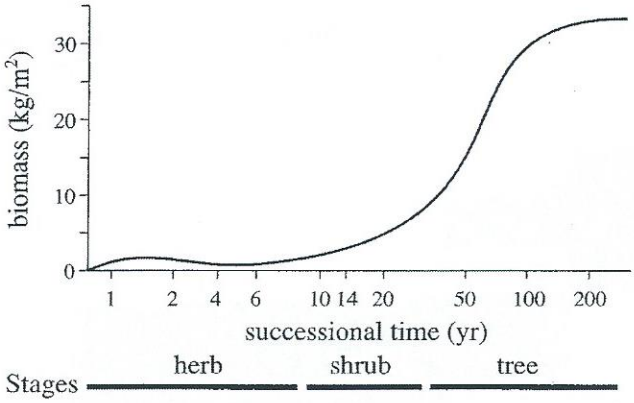

Figure 2

Figures and table adapted from William T. Keeton and James L. Gould, *Biological Science*. ©1986 by W.W. Norton & Company, Inc.

7. According to Figure 1, at the end of Year 50 the net productivity of the land was closest to:

   A. 15 g/m^2/yr.
   B. 50 g/m^2/yr.
   C. 425 g/m^2/yr.
   D. 1,125 g/m^2/yr.

8. Based on the data in Figures 1 and 2, the researchers should make which of the following conclusions about the overall change in net productivity and biomass over the 200 years studied?

   F. Both net productivity and biomass increased.
   G. Both net productivity and biomass decreased.
   H. Net productivity increased and biomass decreased.
   J. Net productivity decreased and biomass increased.

9. According to Figure 1, total net productivity increased the most during which of the following time periods?

   A. From the end of Year 2 to the end of Year 4
   B. From the end of Year 4 to the end of Year 14
   C. From the end of Year 14 to the end of Year 50
   D. From the end of Year 50 to the end of Year 200

10. Which of the following conclusions about net productivity is consistent with the results shown in Figure 1 ?

    F. Net productivity was lowest when shrubs were the dominant plants.
    G. Net productivity was lowest when trees were the dominant plants.
    H. Net productivity was highest when herbs were the dominant plants.
    J. Net productivity was highest when trees were the dominant plants.

11. A student learned that a particular plot of abandoned farmland in Georgia supported eastern meadowlarks, yellowthroats, and field sparrows at a density of at least 1 pair per 10 acres. Based on Table 1, the student would predict that the dominant plants on this plot of land were most likely:

    A. weeds.
    B. grasses.
    C. shrubs.
    D. pines.